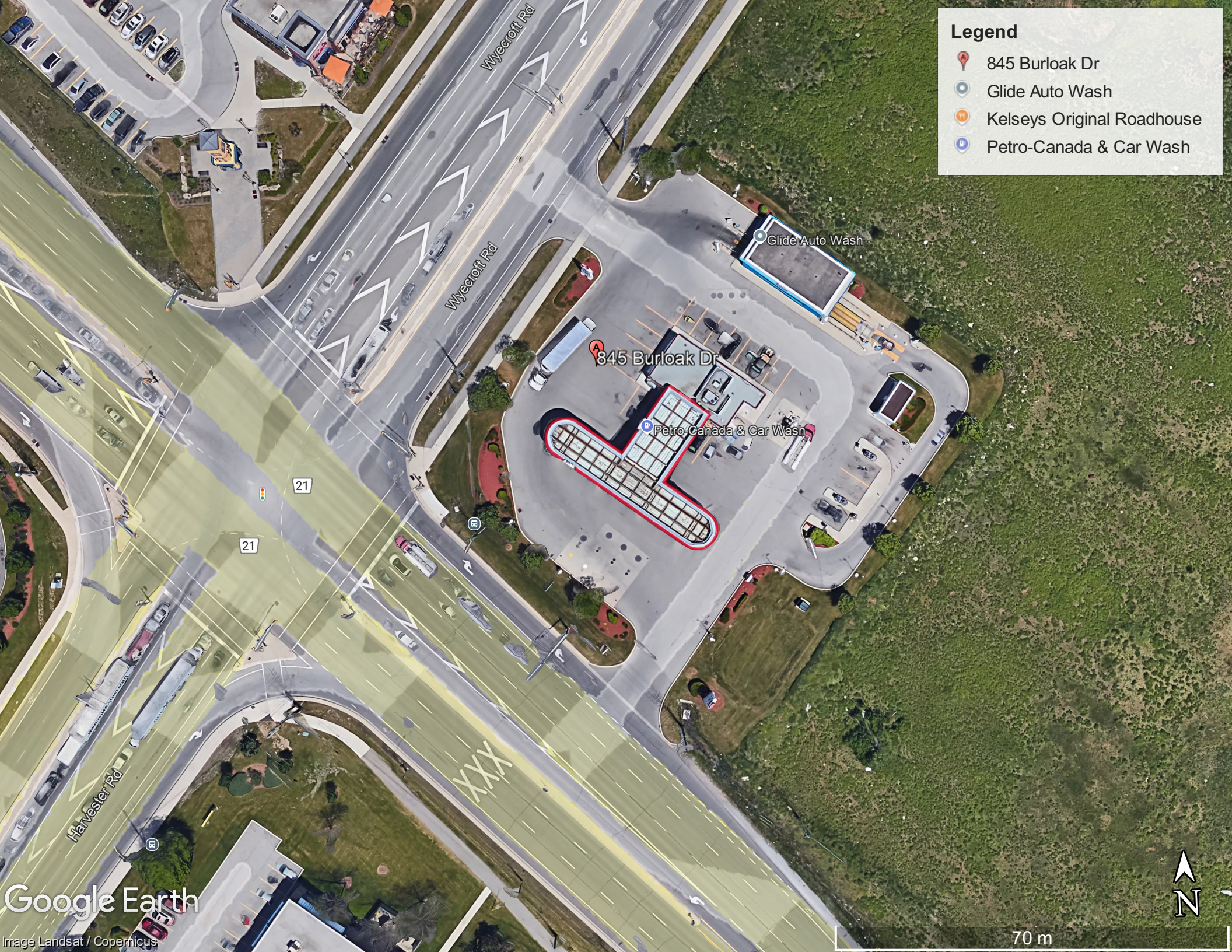
Legend
845 Burloak Dr
Glide Auto Wash
Kelseys Original Roadhouse
Petro-Canada & Car Wash
Wyecroft Rd
Wyecroft Rd
Glide Auto Wash
845 Burloak Dr
Petro-Canada & Car Wash
21
21
Harvester Rd
XXX
Google Earth
Image Landsat / Copernicus
N
70 m

WYECROFT RD.

BURLOAK DRIVE

EDGE OF ORIGINAL ALLOWANCE FOR ROAD

CENTRE LINE OF ORIGINAL ALLOWANCE FOR ROAD

27.95m N36°52'10"E

84.23m N37°14'55"E

N36°18'50"E

102.45m

NEW PROPERTY LINE

STREET LINE N36°25'10"E

54.63m

13.41m N02°37'15"W

22.91m N3°53'00"W

21.97m N4°09'50"W

STREET LINE N4°09'50"W

36.45m N49°04'55"W

46.39m

29.09m

FORMER STREET LINE N44°04'00"W 2

NEW PROPERTY LINE

STREET LINE N44°04'00"W 45.00m

STREET LINE N49°59'10"W 18.72m

LIMIT OF CURRENT DEVELOPMENT

DIESEL – 35000L

REGULAR – 50000L

PREMIUM – 50000L

SUPER – 50000L

CAR WASH

TRANSFORMER

BIS

MTC

LEGEND

- RETAIL - SERVICE ENTRANCE
- RETAIL - CUSTOMER ENTRANCE
- PEDESTRIAN CIRCULATION
- CONCRETE
- PEDESTRIAN CROSSING ASPHALT MARKINGS

THIS FILE WAS CREATED FROM EXISTING SITE PLAN FILE **35207-SP1-rev16-2011-04-27.dwg**

35207 - PED - 2025-03-05.dwg 13:36:05 03/05/2025

ISSUED

NO.	DATE	DESCRIPTION
01	2025-03-05	ISSUED FOR SPA

REVISION

1	-	-

NOTES

SEAL

ONTARIO ASSOCIATION OF ARCHITECTS

K. PAUL LICENCE 4249

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ISSUED FOR CONSTRUCTION DATE

DIMENSIONS AND CONDITIONS TO BE VERIFIED ON THE PREMISES

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2660 Sherwood Heights Dr. Suite 200, Oakville, Ontario, L6J 7Y8
www.kpaularchitect.com
(905)337-9800 fax (905)337-1986

CLIENT

PETRO-CANADA
A Suncor business

DRAWING TITLE

PEDESTRIAN CIRCULATION PLAN

PROJECT

845 BURLOAK DRIVE @ SOUTH SERVICE ROAD
OAKVILLE, ONTARIO

DRAWN	CHECKED
RD	
SCALE	DATE
1:200	2025-03-05
PROJECT NO.	DRAWING NO.
35207	PED

WYECROFT RD.

BURLOAK DRIVE

LIMIT OF ORIGINAL ALLOWANCE FOR ROAD

CENTRE LINE OF ORIGINAL ALLOWANCE FOR ROAD

27.95m N36°52'10"E

84.23m N37°14'55"E

102.45m

N36°18'50"E

5743

STREET LINE N36°25'10"E 54.63m

NEW PROPERTY LINE

13.41m N02°37'15"W

STREET LINE N3°53'00"W 22.91m

STREET LINE N4°09'50"W 21.97m

FORMER STREET LINE N49°04'55"W 36.45m

NEW PROPERTY LINE

STREET LINE N44°04'00"W 29.09m

STREET LINE N44°45'00"W 46.39m

STREET LINE N49°59'10"W 18.72m

SIB (MTC)

LIMIT OF CURRENT DEVELOPMENT

EXISTING PYLON SIGN

NEW A&W DRIVE-THRU DIRECTIONAL SIGN

WHITE PAINTED ASPHALT MARKINGS INDICATING PEDESTRIAN CROSSING

YELLOW PAINTED ASPHALT MARKING CAR PARKING (TYP)

WHITE PAINTED ASPHALT MARKING – TRAFFIC/DRIVE-THRU DIRECTIONAL & STOP BAR

EXISTING "GLIDE EXIT" SIGN

YELLOW PAINTED ASPHALT MARKING TO INDICATE LANE DELINEATION

YELLOW PAINTED ASPHALT MARKING CAR PARKING (TYP.)

PETRO-CANADA CANOPY INCLUDES 2x CANOPY ICONS

YELLOW PAINTED ASPHALT MARKING TO INDICATE NO PARKING

HANDICAP ACCESSIBLE CAR PARKING SIGN. & PAINTED MARKING. SEE BYLAW REQUIREMENTS FOR COLOUR & DESIGN

YELLOW PAINTED ASPHALT MARKING CAR PARKING (TYP.)

YELLOW PAINTED ASPHALT MARKING TO INDICATE NO PARKING

NEW A&W DRIVE-THRU DIRECTIONAL SIGN

A&W DRIVE-THRU DIRECTIONAL SIGN

A&W "MENUBOARD" SIGNAGE & SPEAKERPOST

EXISTING NO ENTRY SIGN

NOTE
ALL PAVEMENT MARKING APPLICATIONS SHALL BE DONE WITH DURABLE THERMOPLASTIC

CANOPY COLUMN SNAP FRAMES (TYP 4 PER ISLAND)

NEW WHITE PAINTED ASPHALT MARKING FOR DRIVE-THRU LANE, & DRIVE-THRU DIRECTION

WHITE PAINTED ASPHALT MARKING TRAFFIC/CAR WASH DIRECTIONAL

EXISTING CAR WASH OVERHEIGHT BAR/SIGN

EXISTING FINISHING AREA SIGN

YELLOW PAINTED ASPHALT MARKING CAR PARKING

WHITE PAINTED ASPHALT MARKING – CARWASH EXIT LANE DIRECTIONAL AND STOP BAR

EXISTING NO ENTRY SIGN

EXISTING "GLIDE ENTRANCE" SIGN

EXISTING PYLON SIGN

THIS FILE WAS CREATED FROM EXISTING SITE PLAN FILE **35207-SP1-rev16-2011-04-27.dwg**

35207 - PM&S - 2025-03-05.dwg 10:55:06 03/06/2025

ISSUED

NO.	DATE	DESCRIPTION
01	2025-03-05	ISSUED FOR SPA

REVISION

1	-	-

NOTES

SEAL

ONTARIO ASSOCIATION OF ARCHITECTS
K. PAUL
LICENCE
4249

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CLIENT

PETRO-CANADA
A Suncor business

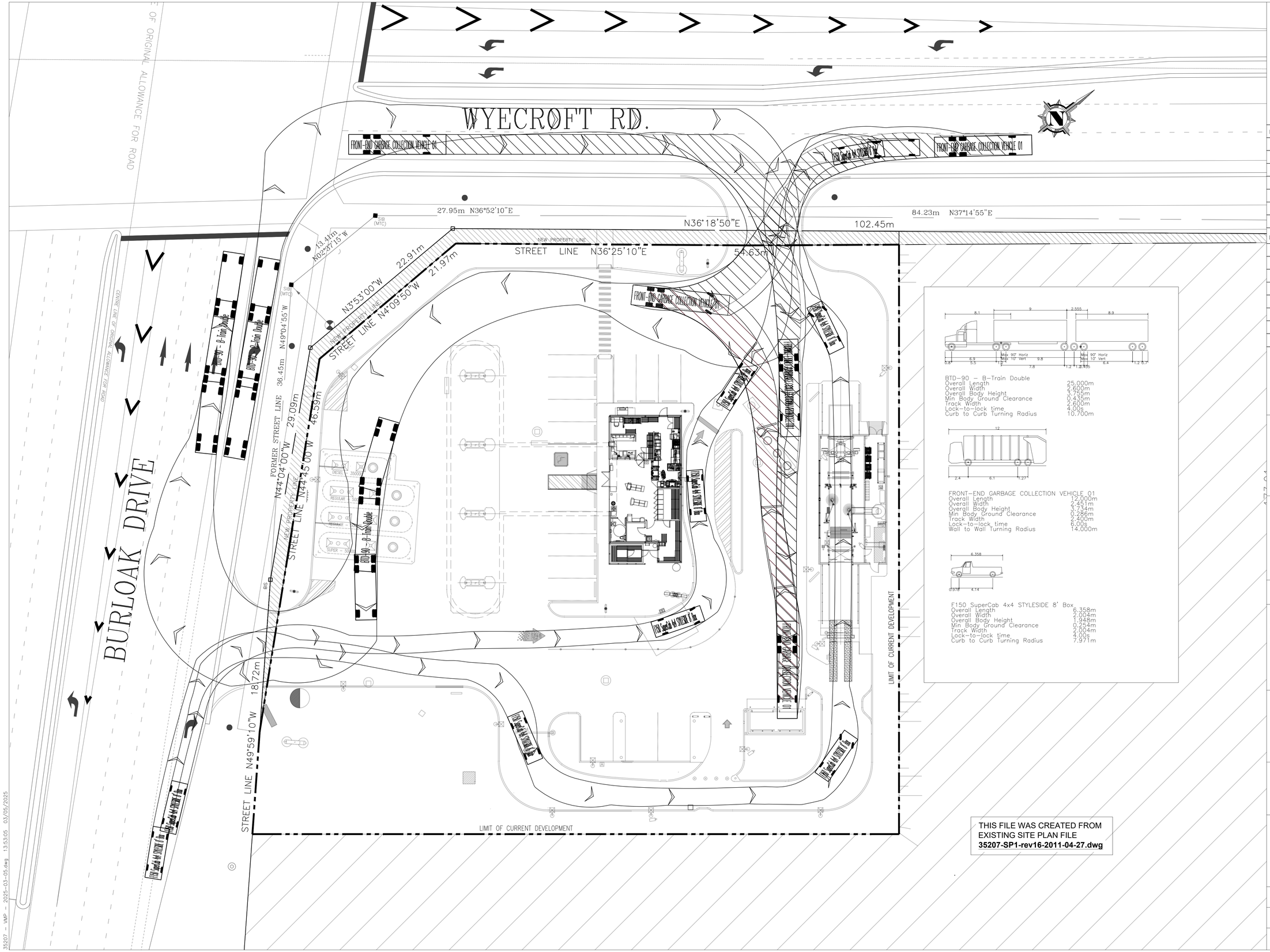
DRAWING TITLE

PAVEMENT MARKINGS AND SIGNAGE PLAN

PROJECT

845 BURLOAK DRIVE @ SOUTH SERVICE ROAD
OAKVILLE, ONTARIO

DRAWN	CHECKED
RD	
SCALE	DATE
1:200	2025-03-05
PROJECT NO.	DRAWING NO.
35207	PM&S



BTD-90 – B-Train Double

Overall Length	25.000m
Overall Width	2.600m
Overall Body Height	4.735m
Min Body Ground Clearance	0.435m
Track Width	2.600m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.700m

FRONT-END GARBAGE COLLECTION VEHICLE 01

Overall Length	12.000m
Overall Width	2.451m
Overall Body Height	3.734m
Min Body Ground Clearance	0.286m
Track Width	2.400m
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	14.000m

F150 SuperCab 4x4 STYLESIDE 8' Box

Overall Length	6.358m
Overall Width	2.004m
Overall Body Height	1.948m
Min Body Ground Clearance	0.254m
Track Width	2.004m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7.971m

THIS FILE WAS CREATED FROM EXISTING SITE PLAN FILE **35207-SP1-rev16-2011-04-27.dwg**

ISSUED

NO.	DATE	DESCRIPTION
01	2025-03-05	ISSUED FOR SPA

REVISION

1	-	-

NOTES

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ONTARIO ASSOCIATION OF ARCHITECTS
K. PAUL
LICENCE
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(905)337-9800 fax (905)337-1986

CLIENT

PETRO-CANADA
A Suncor business

DRAWING TITLE

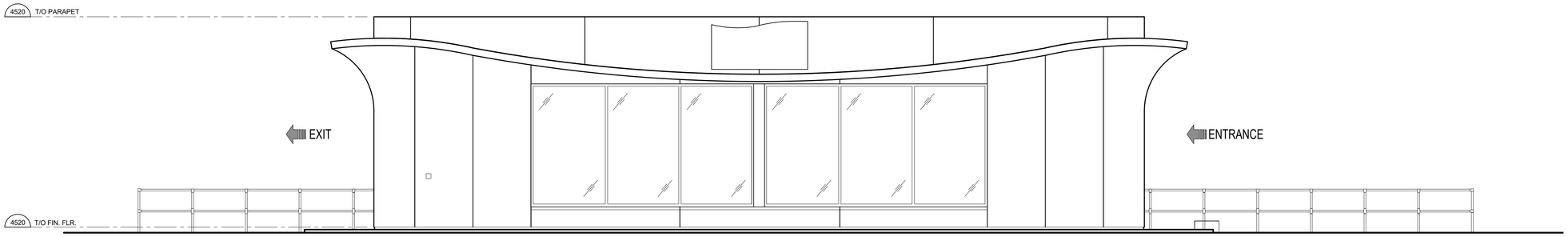
VEHICLE MANEUVERING PLAN

PROJECT

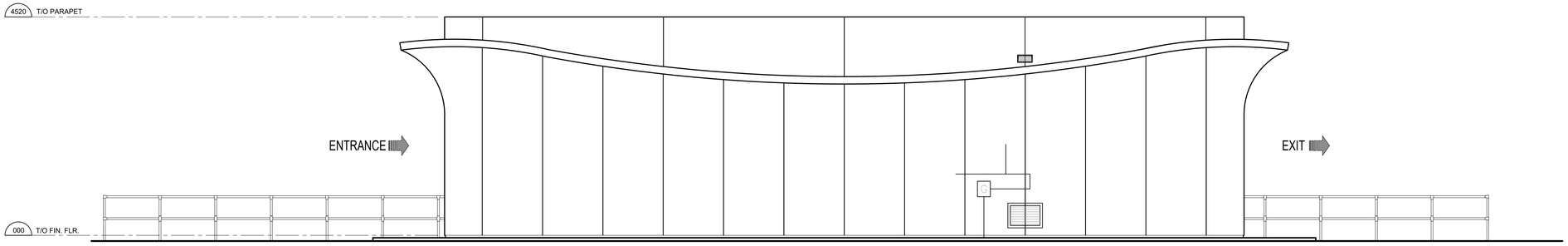
845 BURLOAK DRIVE @ SOUTH SERVICE ROAD
OAKVILLE, ONTARIO

DRAWN	CHECKED
RD	
SCALE	DATE
1:200	2025-03-05
PROJECT NO.	DRAWING NO.
35207	VMP

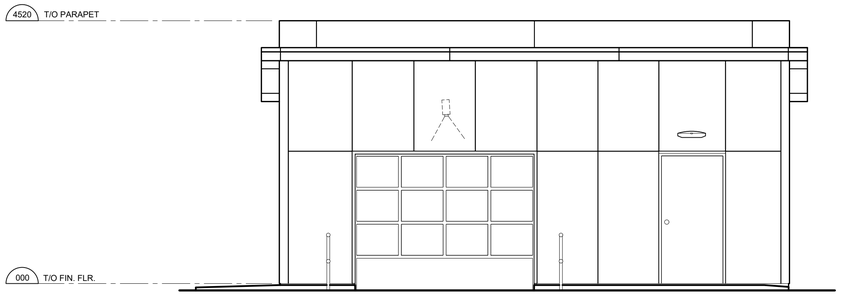
35207 - VMP - 2025-03-05.dwg 13:53:05 03/05/2025



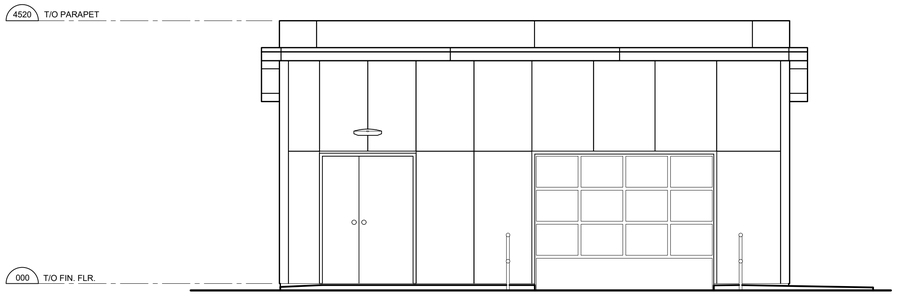
1 SOUTH ELEVATION (EXISTING)



2 NORTH ELEVATION (EXISTING)



3 EAST ELEVATION (EXISTING)



4 WESTELEVATION (EXISTING)

REVISION TABLE

REV.	DESCRIPTION	DRAWN / APP'D. DATE

ISSUE TABLE

TO	FOR	DATE
CITY	ISSUED FOR SPA	23 OCT 2024

METRIC

ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.. CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DESCREPANCIES TO BE REPORTED TO THE PROJECT DESIGNER. DO NOT SCALE DRAWINGS.

SEAL:

CONSULTANT:

K PAUL ARCHITECT INC.
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www.kpaularchitect.com
(905)337-9800 fax (905)337-1986

PETRO-CANADA
A Suncor business

DRAWING TITLE:

CAR WASH ELEVATIONS (EXISTING)

PROJECT:

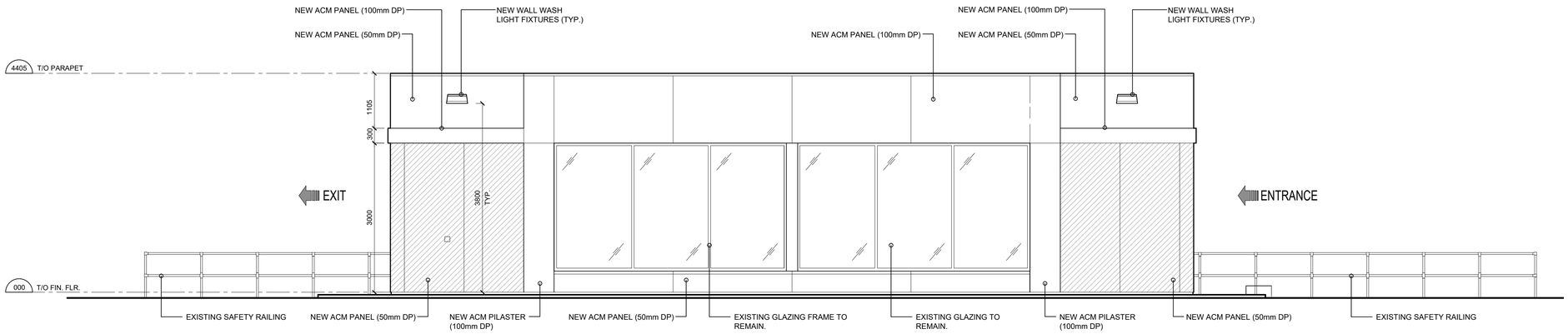
CAR WASH REFRESH

845 BURLOAK DR
OAKVILLE, ONTARIO

DRAWN BY: SL	CAD INFO.: SHEET SIZE D (559 x 864)
DRAWING SCALE: AS NOTED	PETRO-CANADA CAD FILE No.
DATE DRAWN: OCT 2024	CONSULTANT CAD FILE No.
CHECKED BY: CL	PLOT SCALE
APPROVED BY:	PLOT DATE
	PLOT CONFIGURATION

STD No./OUTLET No. 35207

WA-1



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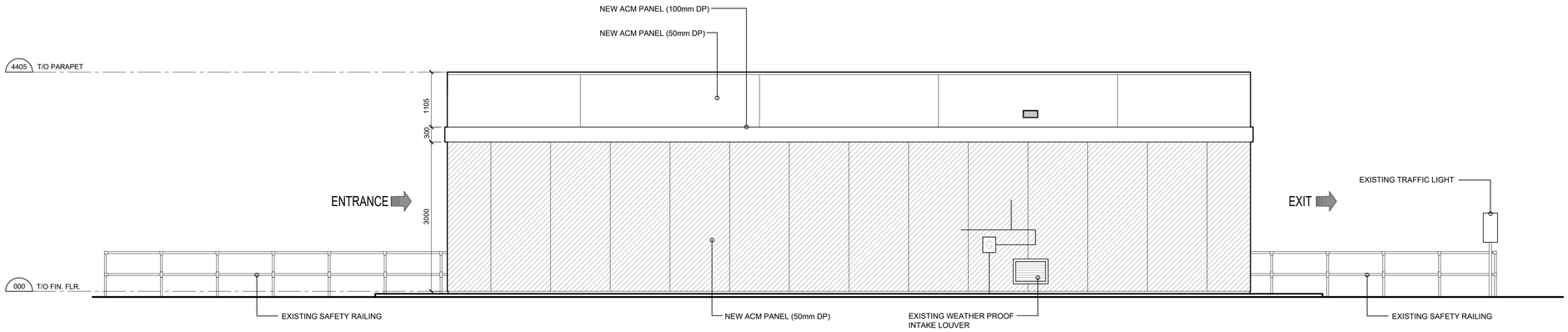

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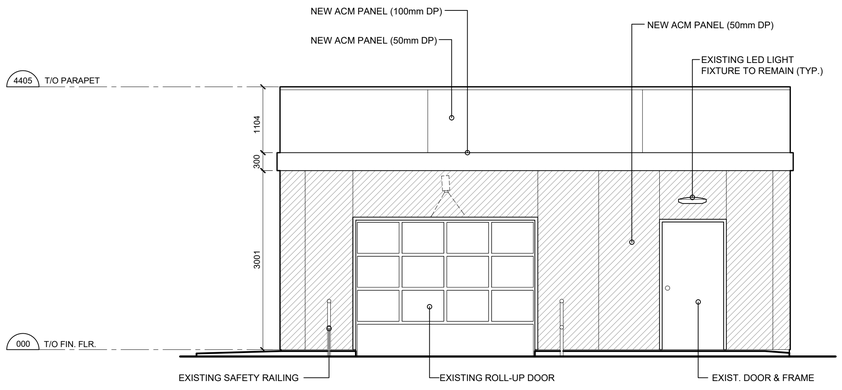
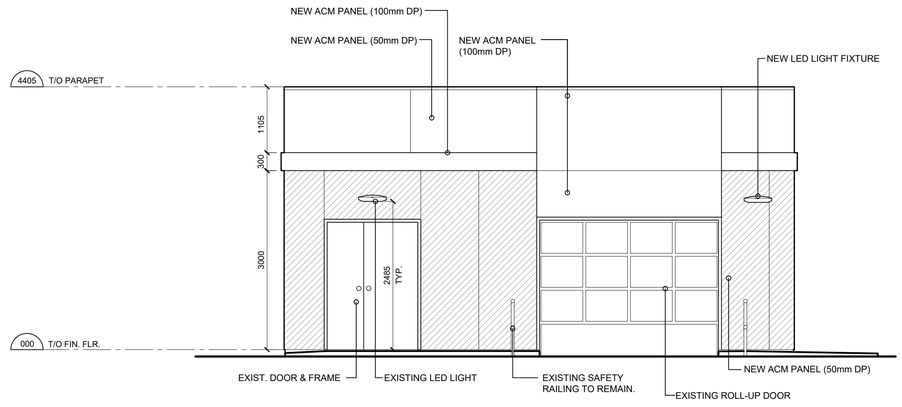


3 EAST ELEVATION (PROPOSED)



4 WEST ELEVATION (PROPOSED)

REVISION TABLE

REV.	DESCRIPTION	DRAWN / APP'D. DATE

ISSUE TABLE

TO	FOR	DATE
CITY	ISSUED FOR SPA	23 OCT 2024

METRIC

ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.. CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DESCREPANCIES TO BE REPORTED TO THE PROJECT DESIGNER. DO NOT SCALE DRAWINGS.

SEAL:

CONSULTANT:

K PAUL ARCHITECT INC.
TORONTO • VANCOUVER • ORLANDO
2660 Sherwood Heights Dr. Suite 200, Oakville, Ontario, L6J 7Y8
www.kpaularchitect.com
(905)337-9800 fax (905)337-1986

PETRO-CANADA
A Suncor business

DRAWING TITLE:

CAR WASH ELEVATIONS (PROPOSED)

PROJECT:

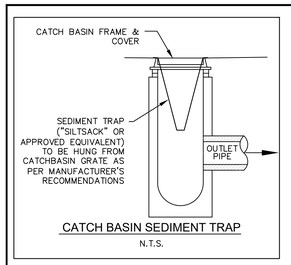
CAR WASH REFRESH

845 BURLOAK DR
OAKVILLE, ONTARIO

DRAWN BY: SL	CAD INFO.: SHEET SIZE D (559 x 864)
DRAWING SCALE: AS NOTED	PETRO-CANADA CAD FILE No.
DATE DRAWN: OCT 2024	CONSULTANT CAD FILE No.
CHECKED BY: CL	PLOT SCALE
APPROVED BY:	PLOT DATE
	PLOT CONFIGURATION

STD No./OUTLET No. 35207

WA-2



LEGEND

- PROPOSED SILT FENCE
- LOCATION OF SEDIMENT PROTECTION
- AS BUILT ELEVATION
- PROPOSED ELEVATION (2002 DESIGN)
- PROPOSED SLOPE (2002 DESIGN)
- PROPOSED ELEVATION
- MATCH TO EXISTING ELEVATION
- MAJOR OVERLAND FLOW
- PROPOSED SLOPE

TOWN OF OAKVILLE'S STANDARD ESC NOTES:

a) ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED ACCORDING TO THE APPROVED PLANS PRIOR TO COMMENCEMENT OF ANY EARTH MOVING WORK ON THE SITE AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH THE INTENDED GROUND COVER.

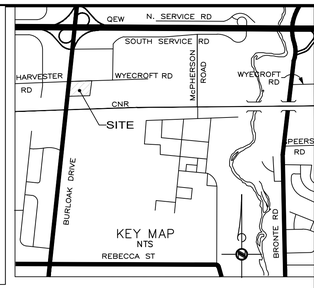
b) EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED BY THE BUILDER/DEVELOPER:
i. WEEKLY
ii. BEFORE AND AFTER ANY PREDICTED RAINFALL EVENT
iii. FOLLOWING AN UNPREDICTED RAINFALL EVENT
iv. DAILY, DURING EXTENDED DURATION RAINFALL EVENTS
v. AFTER SIGNIFICANT SNOW MELT EVENTS

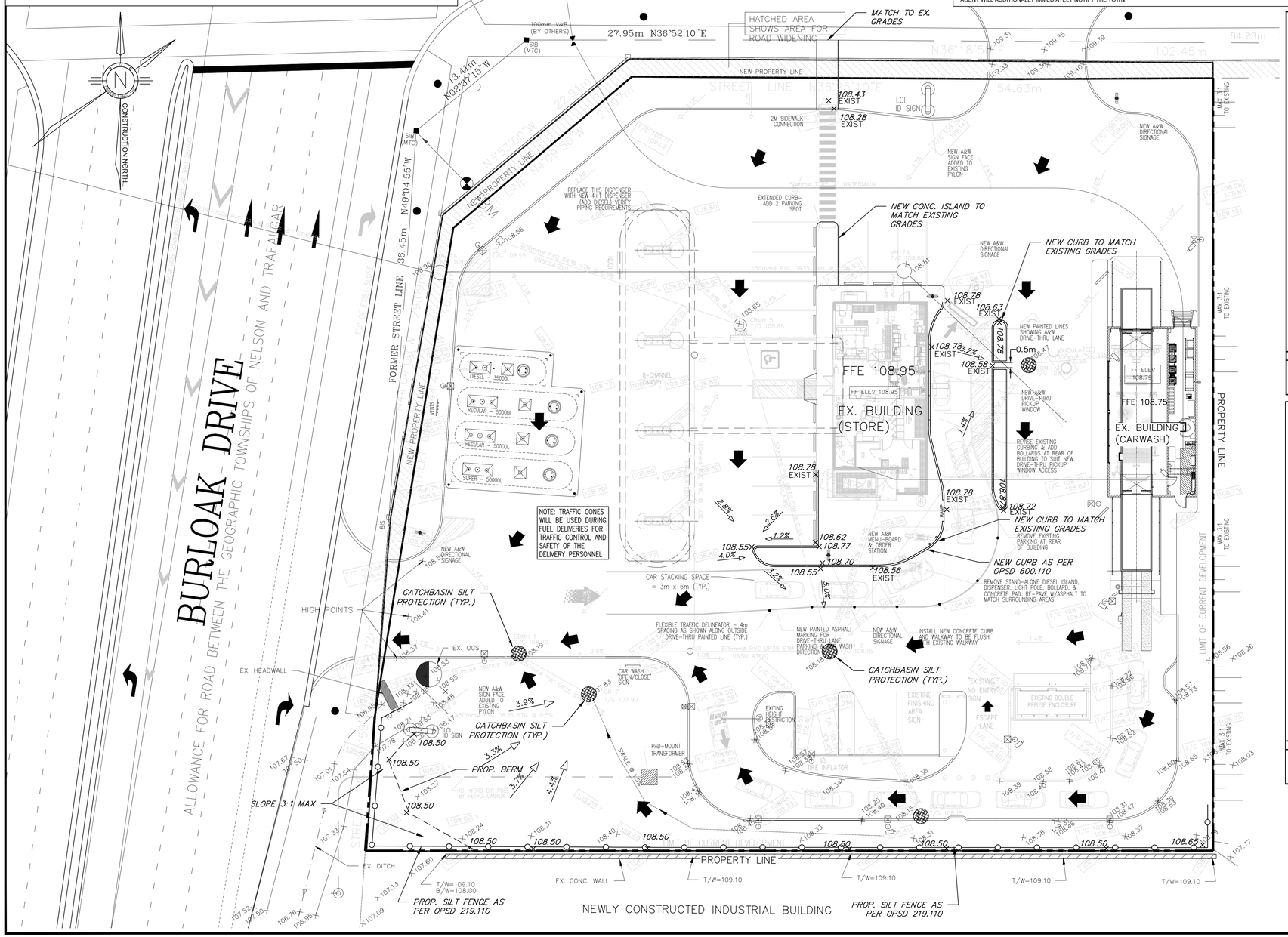
c) EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES. DAMAGED OR CLOGGED DEVICES SHALL BE REPAIRED WITHIN 48 HOURS.

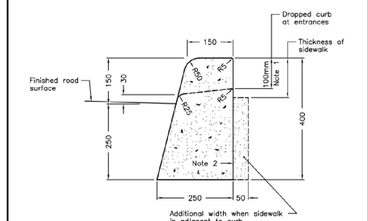
d) WHERE A SITE REQUIRES DEWATERING AND WHERE THE EXPELLED WATER CAN BE FREELY RELEASED TO A SUITABLE RECEIVER, THE EXPELLED WATER SHALL BE TREATED TO CAPTURE SUSPENDED PARTICLES GREATER THAN 40 MICRON IN SIZE. THE CAPTURED SEDIMENT SHALL BE DISPOSED OF PROPERLY PER MOECC GUIDELINES. THE CLEAN EXPELLED WATER SHALL FREELY RELEASE TO A SUITABLE RECEIVER THAT DOES NOT CREATE DOWNSTREAM ISSUES INCLUDING BUT NOT LIMITED TO EROSION, FLOODING - NUISANCE OR OTHERWISE, INTERFERENCE ISSUES, ETC.

e) EXISTING STORM SEWER AND DRAINAGE DITCHES ADJACENT TO THE WORKS SHALL BE PROTECTED AT ALL TIMES FROM THE ENTRY OF SEDIMENT/SILT THAT MAY MIGRATE FROM THE SITE. FOR STORM SEWERS: ALL INLETS (REAR LOT CATCHBASINS, ROAD CATCHBASINS, PIPE INLETS, ETC.) MUST BE SECURED/FITTED WITH SILTATION CONTROL MEASURES. FOR DRAINAGE DITCHES: THE INSTALLATION OF ROCK CHECK DAMS, SILTATION FENCE, SEDIMENT CONTAINMENT DEVICES MUST BE INSTALLED TO TRAP AND CONTAIN SEDIMENT. THESE SILTATION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED PER ITEMS B AND C ABOVE.

f) IN THE EVENT OF A SPILL (RELEASE OF DELETERIOUS MATERIAL) ON OR EMANATING FROM THE SITE, THE OWNER OR OWNERS AGENT SHALL IMMEDIATELY NOTIFY THE MOECC AND FOLLOW ANY PRESCRIBED CLEAN UP PROCEDURE. THE OWNER OF OWNERS AGENT WILL ADDITIONALLY IMMEDIATELY NOTIFY THE TOWN.

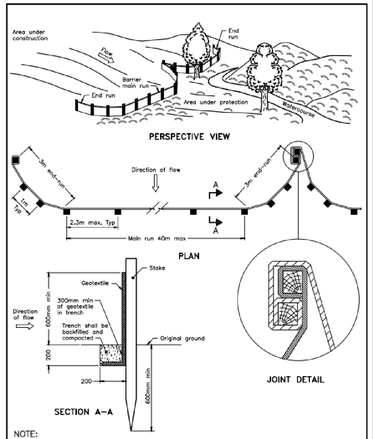






NOTES:
1 When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
2 For slipforming procedure a 5% batter is acceptable.
A Treatment at entrances shall be according to OPSD 351.010.
B Outlet treatment shall be according to the OPSD 610 Series.
C The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev 2
CONCRETE BARRIER CURB		OPSD 600.110



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
LIGHT-DUTY SILT FENCE BARRIER		OPSD 219.110

BENCHMARK:
ALL ELEVATIONS SHOWN HEREON ARE GEODETIC, DERIVED BY DIFFERENTIAL GPS OBSERVATION, AND ARE REFERRED TO THE CAN-NET REFERENCE STATION, HAVING AN ELEVATION OF 109.094m. UTM-17 NORTH CANADA NAD 83 CSRS.

Revisions

REV.	DESCRIPTION	DRAWN	APP'D.	DATE
1	REVISED MENUBOARD LOCATION, DRIVE-THRU STACKING AND STOREFRONT PARKING			2024-07-23
2	SHOWING ALL PARKING & STACKING DIMENSIONS AND INCREASED DRIVE-THRU LANE WIDTHS PER CITY COMMENTS			2024-10-23
3	SMALL CHANGES BASED ON TRAFFIC IMPACT STUDY			2025-02-18

Issue Table

NO.	FOR	DATE
1	ISSUED FOR SPA	2024-01-10
2	ISSUED FOR SPA	2024-08-01
3	ISSUED FOR SPA	2024-11-12
4	ISSUED FOR SPA	2024-12-10
5	ISSUED FOR SPA	2025-02-19

SEAL

LICENCED PROFESSIONAL ENGINEER
C. SHI
100559939
FEB 19, 2025
PROVINCE OF ONTARIO

CONSULTANT
MGM CONSULTING INC
Consulting Engineering & Project Management
555 Industrial Drive
Suite 201
Milton, Ontario
L9T 5E1
Tel: (905) 567-8678
Fax: (905) 875-1339
Email: mgm@mgm.on.ca
www.mgm.on.ca

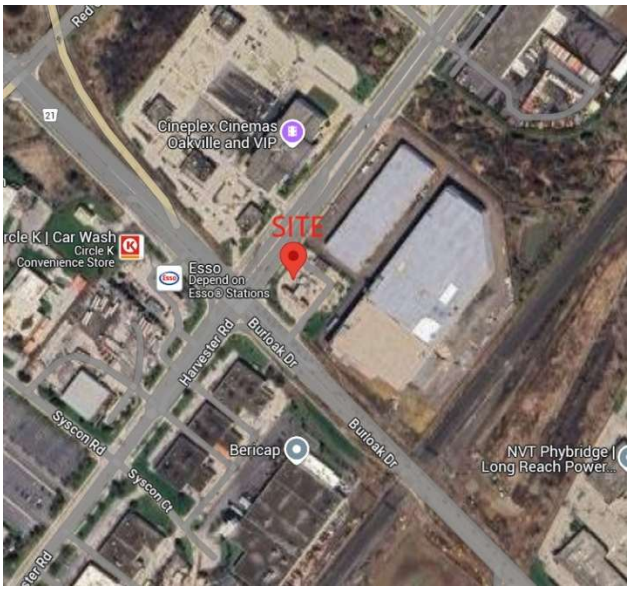
PETRO-CANADA
A Suncor Energy business

CENTRAL REGION

DRAWING TITLE:
UPDATED
SITE GRADING AND ESC PLAN

PROJECT:
ADD A&W TO SITE LAYOUT
845 BURLOAK DR.
@ WYECROFT ROAD, OAKVILLE

DRAWN BY: CS	CAD INFO.:
DRAWING SCALE: 1:200	SHEET SIZE D (559 x 864)
DATE DRAWN: 2024-01-09	PETRO-CANADA CAD FILE No.
CHECKED BY: CD	CONSULTANT CAD FILE No. 2023-071 A1
APPROVED BY: MLS	PLOT SCALE 1:1
STD No./OUTLET No. 35207	PLOT DATE
	PLOT CONFIGURATION PARAMETERS
	SHEET No. CV-1



845 Burloak Dr. @ Wyecroft Road, Oakville

Petro Canada Station

Added Drive-thru for Existing Building

Stormwater Management Design Brief

Prepared for:

Suncor Energy

Prepared by:

MGM Consulting Inc.
555 Industrial Drive
Suite 201
Milton, Ontario
L9T 5E1

File No. 2023-071

Date: November 12, 2024

1. Introduction

MGM Consulting Inc. is retained to complete a stormwater management design brief for a property located at 845 Burloak Drive, Oakville, Ontario in support of a Site Plan Application.

This stormwater design brief intends to provide additional information to support a site plan application for the subject site and to respond pre-consultation comments received on October 16, 2024 from the Development Engineer of the Town of Oakville.

2. Existing Conditions

The subject site is a Petro Canada gas station originally designed and constructed in 2002. It includes an 8-channel self-serve gas bar, a convenience store, and a car wash, occupying a total area of approximately 0.56 hectares. The property has two entrances: one from Burloak Drive to the west and another from Wyecroft Road (South Service Road) to the north. The legal description of the site is Part of Lot 35, Concession 3 South of Dundas Street, in the Town of Oakville, Regional Municipality of Halton.

3. Proposed Conditions

Suncor Energy proposes to construct a drive-through facility at the rear of the existing convenience store. The scope of work includes demolishing the existing diesel gas bar, adding new curbs, and updating line painting. The total area of the building will remain the same, with no anticipated increase in occupancy load or servicing demand for the site. No major site grading or servicing revisions are required for this development; all underground servicing will remain as originally designed in 2002. Additionally, a minor berm is proposed in the landscaped area along the southern property line to contain major stormwater flow on-site, directing it toward the Burloak Drive right-of-way, consistent with the original design.

4. Minor and Major Storm System.

According to the as-built survey completed in December 2023 by MGM Consulting Inc., the majority of the current site grading aligns with the originally approved grading design. However, we have identified a small section of the landscape strip along the southern property line that requires regrading to ensure that a 100-year storm event is fully contained on-site and directed to the Burloak Drive right-of-way through the entrance. Details of this regarding are provided in the updated CV-1 Plan.

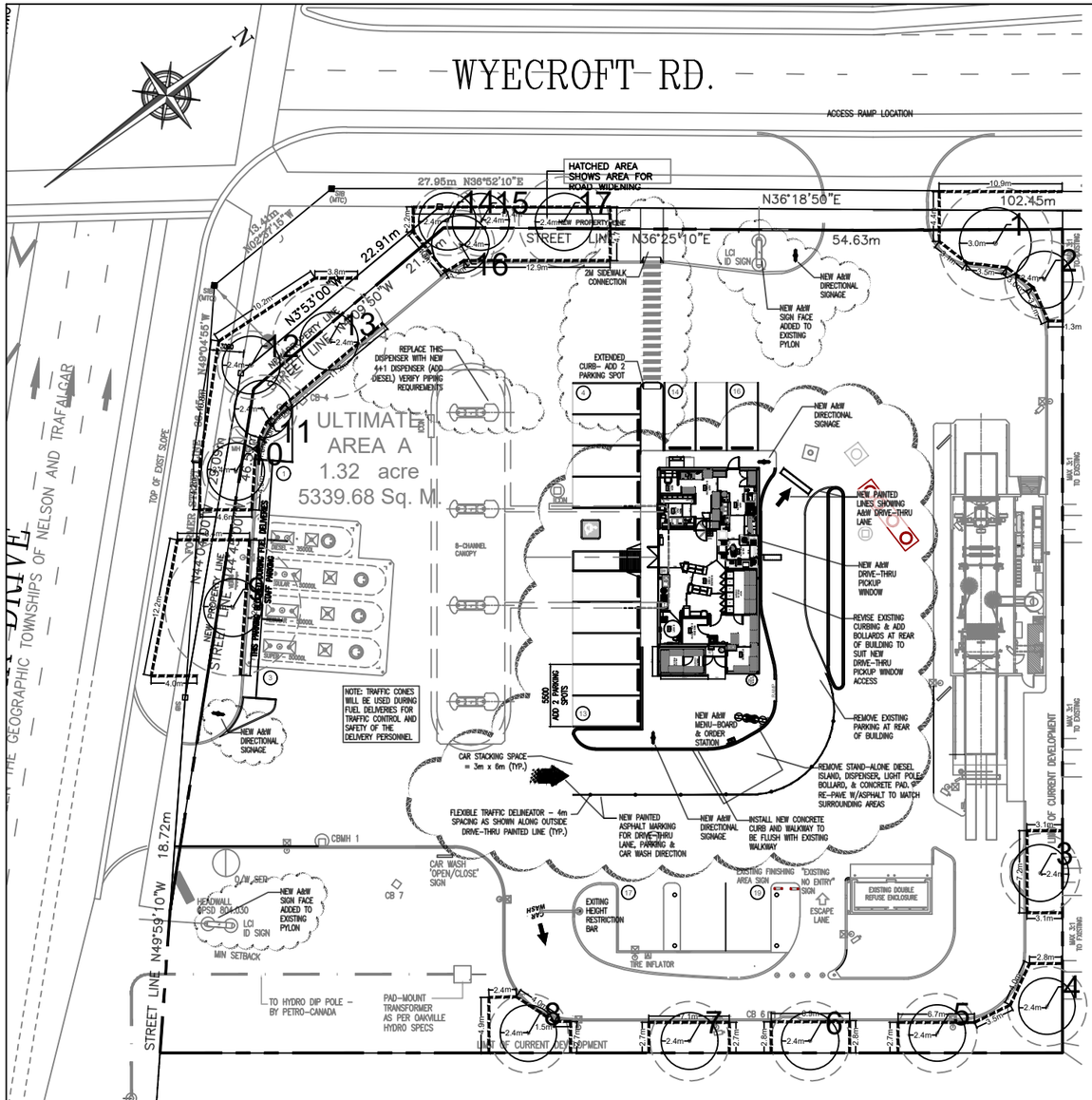
As outlined in the original Stormwater Management (SWM) Design, in the event of severe storm conditions or a blocked outlet, overland flow will occur at an as-built elevation of 108.37 meters through the entrance to Burloak Drive right-of-way. Stormwater runoff from events up to a 100-year storm will be managed on-site via surface ponding and the underground storm sewer system. The SWM design has been developed to provide the necessary on-site storage to ensure that all post-development flows up to the 100-year event are controlled to the pre-development 5-year flow rate. An orifice tube was installed as a key control feature to manage peak flow rates effectively.

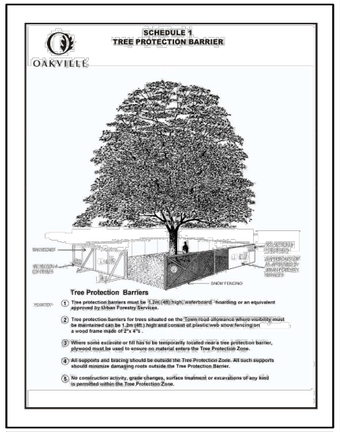
5. Summary

In conclusion, the drainage runoff is contained within the site, consistent with the conditions of the originally approved site plan. No drainage from the subject site is anticipated to overflow onto the neighboring property to the south, in full compliance with the original Stormwater Management Design Strategy. The site functions as intended in the initial design, ensuring that stormwater management aligns with the approved plan's objectives.

Prepared by:
MGM CONSULTING INC.

Chenchen Shi, P.Eng.





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- **1** Tree Identification Number*
- Approximate Tree Location with Dripline by Arborist
- Minimum Tree Protection Zone (mTPZ)*
- Required Tree Protection Barrier (snow)

*Please refer to Table 1 for the detailed tree inventory and minimum tree preservation zone distances. Trees were located using aerial photo interpretation and estimations made in the field.

Table 1. Detailed Tree Inventory

Location: 845 Burloak Drive, Oakville Date: 24 January 2024 Surveyors:

Tree #	Common Name	*Scientific Name*	Diameter at Breast Height (DBH)[1] (cm)	Trunk Integrity	Crown Structure	Crown Vigour	Crown Dieback	Tree Height	Dripline (radius)	minimum Tree Protection Zone (mTPZ) (radius)[2]	Comments	Ownership
				Good (G), Fair (F), Poor (P)			%	(m)	(m)	(m)		
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11	Crabapple species	*Malus* sp.	24	FG	FG	FG		4.5	3	2.4	Town Tree ID: 50343, moderate pruning wounds with decay, moderate epicormic branches	Subject
12	Crabapple species	*Malus* sp.	19,23 [30]	FG	FG	FG		4.5	3	2.4	Town Tree ID: 76285, moderate pruning wounds with decay, minor epicormic branches, union at 1m	Public
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END												

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Submission and Revision Notes

No.	Description	Date	By
3	Report and Plan Revision	27 February 2025	AC
2	Report and Plan Revision	30 July 2024	AC
1	Report and Plan Submission	15 February 2024	AC

Source Data: Town of Oakville (aerial), K. Paul Architect Inc. (site plan), Popovich Associates (landscape plan)

Project:
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Oakville, ON

Client:
Petro-Canada c/o I.G.P. Realty Advisors Inc.
19 Galsworthy Avenue
Scarborough, ON
M1R 2N5

Date:
15 February 2024

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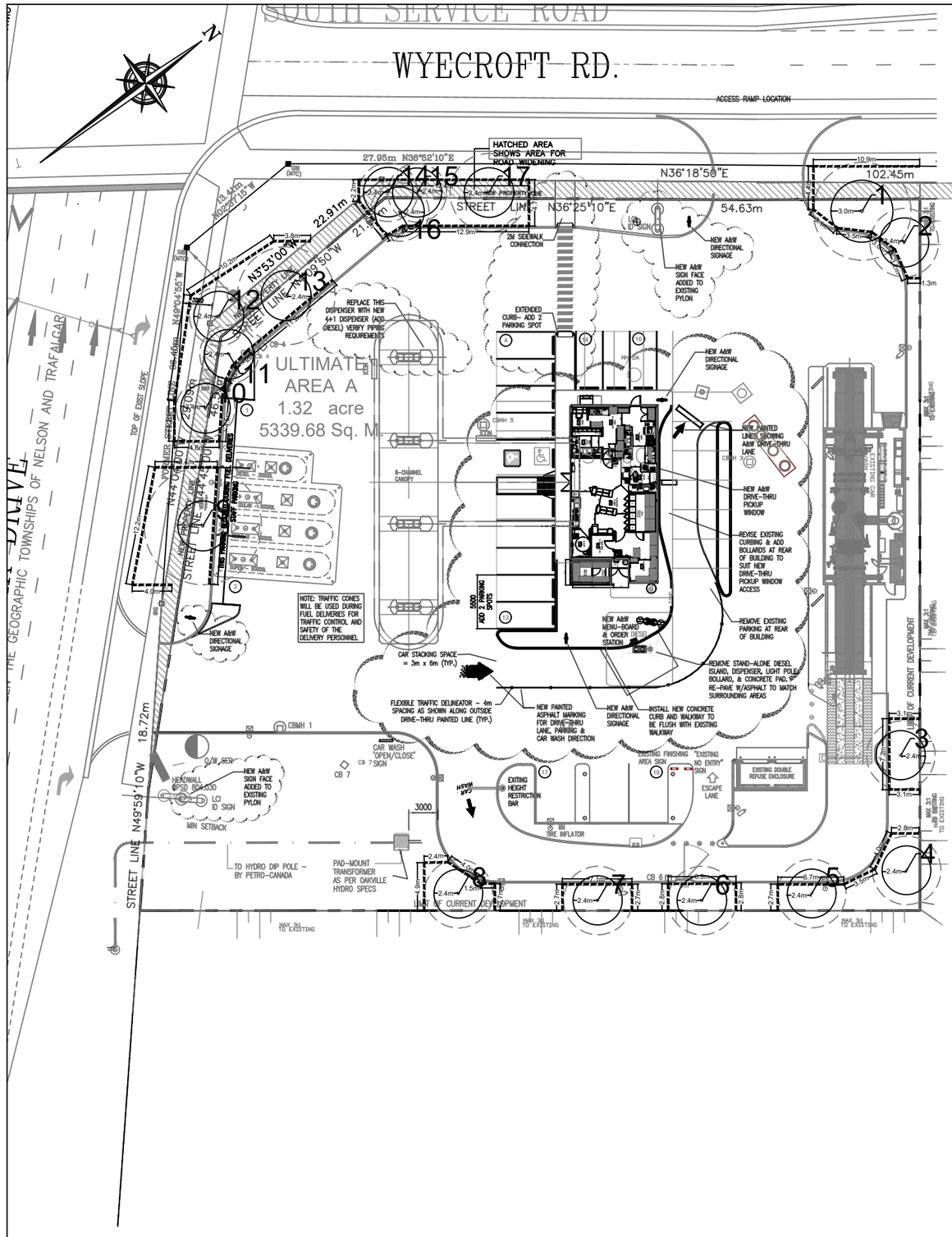
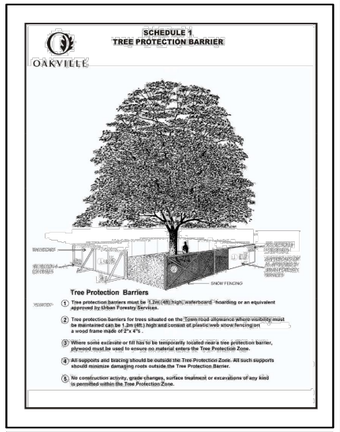
647.983.8817
Amy Choi, B.Sc. (Env.), M.Sc.F.
ISA Certified Arborist® #ON-1609A
ISA Tree Risk Assessment Qualified

TREE INVENTORY PLAN

Figure 1a Scale 1:500





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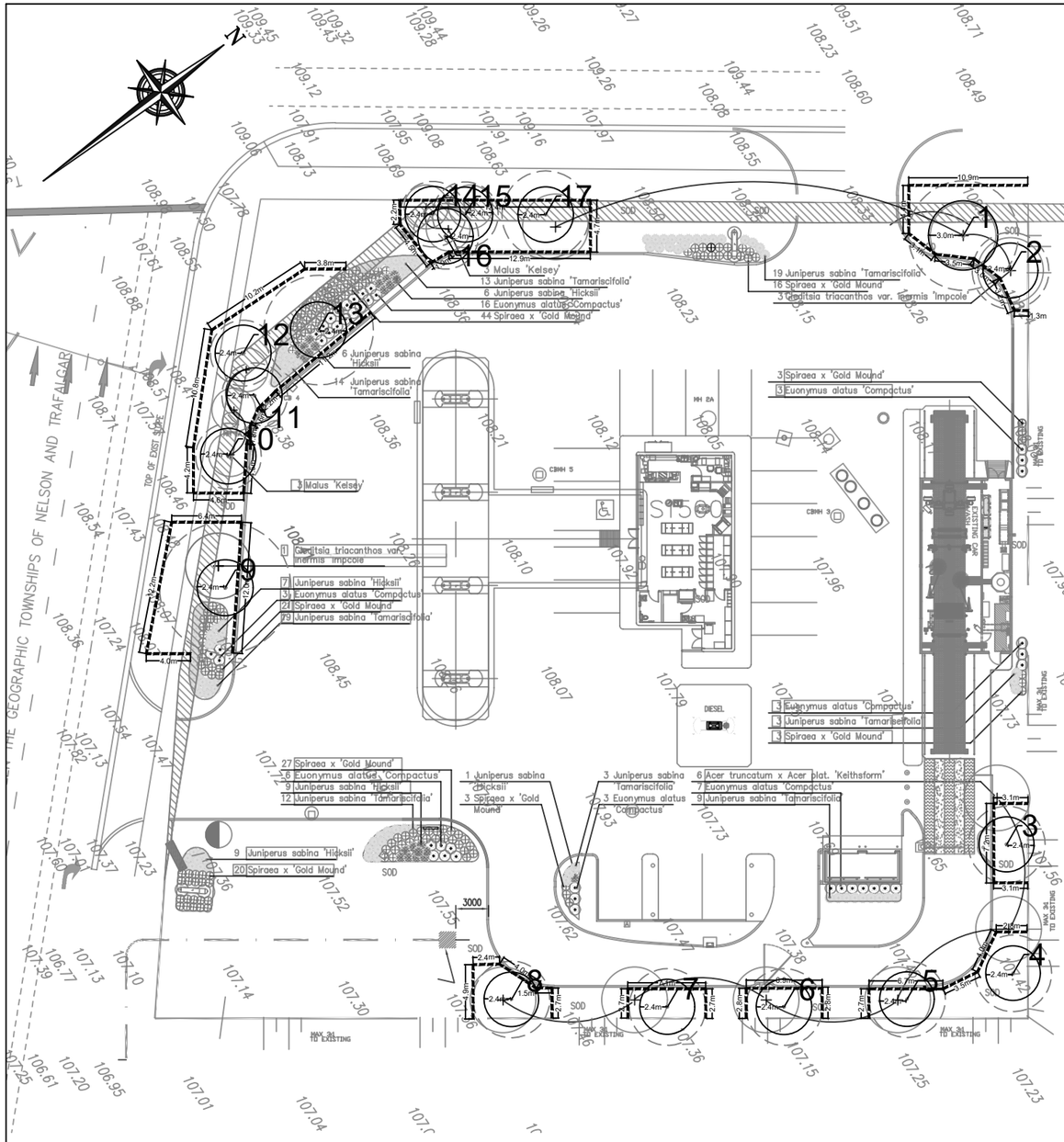
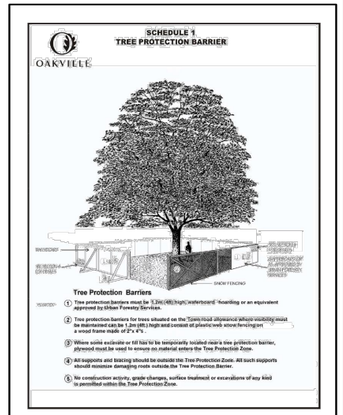
TREE INVENTORY PLAN

Figure 1ab Scale 1:500





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TREE INVENTORY PLAN

Figure 1b | Scale 1:500

OAKVILLE

FORM 2

Pre-consultation Form

Please note pre-consultations are only valid for Six (6) Months from the date of Signing: See Note (a)

Applicant: Suncor Energy Inc.

Site Location: 845 Burloak Drive

Proposal: Proposed addition of an A&W take out restaurant to the existing building located on the property.

Official Plan Amendment	☐	Plan of Subdivision	☐	Site Plan	☑
Zoning By-law Amendment	☐	Plan of Condominium	☐		

Terms of Reference for Listed Studies / Reports can be found here:
http://www.oakville.ca/business/terms-of-reference.html

SUBMISSION REQUIREMENTS			
Materials to be Provided:	**OPA/ZBA/SUB/ CONDO/SITE PLAN** Required	**NOTES:**	**Digital File Name**
Plans			
Aerial Photograph(s)	☑		XX_Aerial_v1_yyyy-mm-dd
Survey/Legal Plan	☑		XX_Survey_v1_yyyy-mm-dd
Concept Plan	☐		XX_Concept_v1_yyyy-mm-dd
Draft Plan of Subdivision and/or Draft Plan of Condominium (individual lots and/or units to be shown on draft Plan)	☐		XX_DraftSub_v1_yyyy-mm-dd XX_DraftCondo_v1_yyyy-mm-dd
Site Plan & Site Plan Details	☑		XX_SitePlan_v1_yyyy-mm-dd XX_SitePlanDetail_v1_yyyy-mm-dd
Park/Open Space Concept Plan	☐		XX_ParkConcept_v1_yyyy-mm-dd
Building Elevations & Renderings	☑		XX_Elevations_v1_yyyy-mm-dd XX_Renderings_v1_yyyy-mm-dd
Building Floor Plans (including roof Plan)	☑		XX_FloorPlans_v1_yyyy-mm-dd XX_RoofPlan_v1_yyyy-mm-dd
Landscape Plan & Details	☑		XX_Landscape_v1_yyyy-mm-dd XX_LandsDetails_v1_yyyy-mm-dd
Pedestrian Circulation Plan	☑		XX_PedCircPlan_v1_yyyy-mm-dd
Streetscape Plan	☐		XX_Streetscape_v1_yyyy-mm-dd
Site Servicing Plan	☑		XX_Servicing_v1_yyyy-mm-dd
Grading & Drainage Plan (including topographic information)	☑	see eng. comments	XX_Grading_v1_yyyy-mm-dd XX_Drainage_v1_yyyy-mm-dd
Erosion and Sediment Control Plan	☑		XX_ErosionSed_v1_yyyy-mm-dd
Lighting Plan &/or Photometric Plan	☑	if new lighting proposed	XX_Photometric_v1_yyyy-mm-dd
Truck Turning Plan	☑	can show on site plan	XX_TruckTurning_v1_yyyy-mm-dd
Pavement Markings/Signage Plan	☑	note R in R out	XX_MarkingsSign_v1_yyyy-mm-dd
Construction Storage/Staging Plan	☐		XX_ConstructSS_v1_yyyy-mm-dd

Materials to be Provided:	OPA/ZBA/SUB/CONDO/SITE PLAN Required	NOTES:	Digital File Name
Demarcation of limits of natural features (i.e. top-of-bank and/or natural hazards)	☐		XX_NaturalLimit_v1_yyyy-mm-dd
Tree Canopy Cover Plan & calculation	☐		XX_CanopyCover_v1_yyyy-mm-dd
Waste Management Plan	☐		XX_WasteManage_v1_yyyy-mm-dd
Reports and Studies			
Completed Application Form/Fees	✔		XX_AppForm_v1_yyyy-mm-dd
Planning Justification Report/Letter	☐	*not required for condominium	XX_PJR_v1_yyyy-mm-dd
Character Impact Analysis	☐		XX_CharacterImp_v1_yyyy-mm-dd
Draft Zoning By-law Amendment	☐		XX_DraftZBLA_v1_yyyy-mm-dd
Draft Official Plan Amendment	☐		XX_DraftOPA_v1_yyyy-mm-dd
Urban Design Brief	☐		XX_DesignBrief_v1_yyyy-mm-dd
Tree Vegetation Study/Arborist Report and Tree Protection Plan	✔	Scoped	XX_ArbReport_v1_yyyy-mm-dd XX_TPP_v1_yyyy-mm-dd
Functional Servicing Study/Report	☐		XX_FSR_v1_yyyy-mm-dd
Stormwater Management Study/Report	✔	Brief	XX_SWM_v1_yyyy-mm-dd
Environmental Impact Study/Report	☐		XX_EIR_v1_yyyy-mm-dd
Transportation Impact Analysis	✔	per Region and Town TOR	XX_TIS_v1_yyyy-mm-dd
Heritage Impact Assessment	☐		XX_HIA_v1_yyyy-mm-dd
Archaeological Assessment	☐		XX_Arch_v1_yyyy-mm-dd
Market Impact Study	☐		XX_MarketImpact_v1_yyyy-mm-dd
Capital Impact Study	☐		XX_CapitalImpact_v1_yyyy-mm-dd
Noise & Vibration Study	☐		XX_NoiseVibration_v1_yyyy-mm-dd
Geotechnical/Soils Report	☐		XX_Geotech_v1_yyyy-mm-dd
Environmental Site Assessment (i.e. Phase 1)	☐		XX_ESS1 _v1_yyyy-mm-dd
ESSQ	✔		XX_ESSQ_yyyy-mm-dd
Shadow Impact Analysis	☐		XX_Shadow_v1_yyyy-mm-dd
Wind Study/Micro-Climate	☐		XX_WindStudy_v1_yyyy-mm-dd
Sample Materials Board/Photos	☐		XX_Materials_v1_yyyy-mm-dd
3-D Computer Model (i.e. SketchUp)	☐		XX_3DModel_v1_yyyy-mm-dd
Minutes and attendance list of Applicant-initiated "Public Information Meeting" (see Note g)	✓	*not required for site plan	XX_PIMMinutes_yyyy-mm-dd XX_Attendlst_yyyy-mm-dd
North Oakville			
Environmental Implementation Report/Functional Servicing Study	☐		XX_EIRFSS_v1_yyyy-mm-dd
Map and Accompanying Tables Showing Densities and Designations	☐		XX_DensityMap_v1_yyyy-mm-dd XX_DensityTable_v1_yyyy-mm-dd
NOUFSMP/Tree Canopy Cover Plan & Calculation	☐		XX_NOUFSMP-TCCP_v1_yyyy-mm-dd
Planning Statistics Spreadsheet	☐		XX_PlanningStats_v1_yyyy-mm-dd

Sustainability Checklist		☐		XX_SustainCheck_v1_yyyy-mm-dd
Transit Facilities Plan		☐		XX_TransitFac_v1_yyyy-mm-dd
Area Design Plan		☐		XX_AreaDesign_v1_yyyy-mm-dd
Executed Adhesion Agreement		☐		XX_AdhesionAgmt_v1_yyyy-mm-dd
Other				
Easement Documents		☑		XX_XXXXX_v1_yyyy-mm-dd
		☐		XX_XXXXX_v1_yyyy-mm-dd

1. Conformity with the Regional Official plan land use designation: Yes ■ No ☐

   If "NO", an application has been made to amend the Regional Official Plan: Yes ■ No ☐

2. Existing Official Plan Designation: Business Commercial

   Conformity with the Town's Official Plan land use designation: Yes ■ No ☐

   More Information Required ☐

   If "No", the nature of the amendment needed:

   _____

3. Existing Zoning: E4

   Conformity with the Town's Zoning By-law: Yes ☐ No ■

   More Information Required ☑

   If "No", the Proposed zoning is: See Zoning Comments

   _____

4. Related File No.: _____

5. Informal Open House: To be held on:_____ Has been held on:_____

6. Additional Agencies/Departments to be contacted: _____

7. Related notes pertinent to the application:_____

   See Comment Report

8. A site walk is required as a second part of the pre-consultation meeting: Yes ☐ No ■

If "Yes", the site walk is scheduled for (date & time): N/A

Notes:

a) **This agreement expires 6 months from the date of initial signing (date of pre-consultation meeting) or at the discretion of the Director of Planning or his/her designate. In the event that this Pre-consultation Agreement expires prior to the application being accepted, and/or new policy and/or by-laws apply, another agreement may be required.**

b) The purpose of this agreement is to identify the information required to prepare a complete application as set out in the *Planning Act*. Pre-consultation does not imply or suggest any decision whatsoever on the part of Town staff or the Corporation of the Town of Oakville to either support or refuse the application. Comments provided at a pre-consultation meeting are preliminary and based on the information submitted for review at that time.

c) When a formal application is made, the application fee may be processed immediately; however, this does not constitute the application being deemed complete for *Planning Act* purposes. An annual maintenance fee will apply to all applications, one year after being deemed complete for *Planning Act* purposes, and annually thereafter.

d) For all applications for Official Plan Amendment, Zoning By-law Amendment, Plan of Subdivision and Plan of Condominium, the applicant acknowledges that the Town is not responsible for the construction or installation of the sign and the applicant agrees to submit a photo of the sign on the property. This shall be submitted within one week of receiving confirmation of a complete application.

e) An application submitted without the requisite information and number of copies identified in this Pre- consultation Agreement, or in the Site Plan application form, will not be accepted. Submission mot meeting these criteria will be returned to the agent or property owner. If a site walk is required, the application may not be considered complete until it has taken place.

f) All reports, documents and drawings must be submitted in electronic (i.e. PDF or JPG) form.

g) An applicant is required to conduct a 'Public Information Meeting' (PIM) prior to submission of a development application and shall be documented as described below. The timing of the PIM may be waived at the discretion of the Director of Planning.

The PIM would summarize the purpose and intent of the proposed application (s), after having given a minimum of a two (2) week, mailed, notice to residents within 120 metres of the subject property (ies). The date of the 'Public Information Meeting' shall be coordinated in consultation with the Ward Councillors and Town of Oakville planning staff. The minutes of the 'Public Information Meeting', shall outline the nature of the proposed development, the planning approvals being sought from the Town, the nature of the input received by the attending public and how this input may have informed the development proposal.

h) Acknowledgement of Public Information:

The applicant acknowledges that the Town considers the application forms and all supporting materials, including studies and drawings, filed with any application to be public information and to form part of the public record. By filing an application, the applicant consents to the Town photocopying, posting on the Internet and/or releasing the application and any supporting materials either for its own use in processing the application or at the request of a third party, without further notification to or permission from the applicant. The applicant also hereby states that it has authority to bind its consultants to the terms of this acknowledgement.

i) Additional studies may be required during the processing of an application, depending on the issues identified and information required, as the application proceeds through the planning review process.

j) Prior to undertaking any topsoil stripping or earthworks, the applicant may be required to obtain a site alteration permit in accordance with the Town's Site Alteration By-law.

k) Applicants are advised that the removal of trees prior to a final decision being made, or a site alteration permit is issued, is strongly discouraged by the Town.

l) Where applications may consider potential emissions, please refer to the Town's Health Protection Air Quality By-law (2010-035) at http://oakville.ca/environment/health-protection-air-quality.html

Staff Signatures:

Paul Barrette		Oct. 16, 2014
Town Planning Staff	Planning Staff (Signature)	Date
Shiza Mushtaq		October 16, 2024
Regional Planning Staff	Regional Staff (Signature)	Date
Conservation Authority Staff	Conservation Authority Staff (Signature)	Date

Proponent Signatures:

By signing this agreement, I/we acknowledge that, subject to any appeals, the drawings, reports and other requirements indicated above must be submitted along with a completed application form, any information or materials prescribed by statute in both paper (including reduced copies) and electronic form, the required planning applications" fees and this executed Pre-consultation agreement to be considered complete. In addition, I have read, understood, and agreed to the Notes listed above.

Agent (Print) (I have the authority to bind the Owner)	Agent (Signature)	Date
Owner (Print)	Owner (Signature)	Date

Overview of Submission Requirements

Terms of Reference for Listed Studies / Reports can be found at: http://www.oakville.ca/business/terms-of-reference.html

Archæological Assessment
A report must be completed in accordance with Provincial requirements and the Regional Archæological Master Plan in or near areas of archæological potential.

Aerial Photograph(s)
A recently dated and high-resolution aerial photo showing the context of the application is required for all applications.

Area Design Plan
Where the North Oakville Masterplan is not being followed, an Area Design plan must be submitted.

Building Elevations
Drawings or Plans which illustrate the exterior design of a building including the proposed building materials. Drawings can be either 2-dimensional or 3-dimensional. At least 2 sets of drawings must be rendered in colour.

Building Floor Plans (including Roof Plans)
Drawings or Plans which illustrate the layout and measurement of a building's floorplate and roof, including, but not limited to: the location of stairwells, elevators, hallways, garbage / recycling areas, and common areas, among other elements.

Capital Impact Assessment
A Capital Impact Assessment estimates the cost of local municipal capital infrastructure required to service a new development. In general, this must be completed for any new development proposing more than two residential units, or more than 5000 sq. m. of non-residential development.

Character Impact Analysis
This study explains how the development will maintain and protect the existing character of the community it is proposed within. Specific reference to Part "D", s. 11.1.8 and 11.1.9 is required.

Completed Application Form
The application form which indicates the prescribed information.

Computer Model
A 3-dimensional digital model of the building(s) and context. The model is to be completed in Google Sketchup or AutoCAD.

Concept Plan
Concept plan showing the proposed development in context of adjacent lands including land across the street. The plan is to show all buildings, land uses, sidewalks, walkways, driveways, street trees, street intersections and any other natural or made-made elements.

Construction Storage and Staging Plan
A plan that identifies the storage location of construction vehicles and supplies during the construction of the project.

Heritage Impact Assessment
A Heritage Impact Assessment demonstrates how new development involving a heritage resource will preserve, protect, improve and/or manage the resource(s).

Demarcation of limits of natural features (i.e. top of bank and/or natural hazards)
A recent plan of survey showing the staked limits of natural features (e.g. physical top of bank, stable top of bank, natural heritages system limit, natural hazards and/or lands regulated by a Conservation Authority) to the satisfaction of Halton Region, the applicable Conservation Authority and the Town of Oakville. Natural features requiring protection shall be clearly staked in the field and construction fencing shall be installed to the satisfaction of the Town in accordance with the Site Alteration By-law requirements.

Draft Official Plan Amendment
The applicant must provide proposed amended text and/or map amendments for consideration.

Draft Plan of Subdivision and/or Draft Plan of Condominium (The information required on plans is to be in accordance with the *Planning Act* and its regulations. See Appendix E for details.
a) the proposed subdivision or condominium draft plan with key maps

Draft Zoning By-law Amendment
The applicant must provide text and schedules for proposed Zoning By-law Amendments.

Environmental Impact Statement / Study
These statements address, among other things, contain a description of the proposal, a description of the natural environment, an assessment of environmental effects, a description of mitigating measures and recommendations.

Environmental Implementation Report / Functional Servicing Study
An Environmental Implementation Report must be prepared for the subcatchment area(s) of North Oakville where the proposal is located. The reports shall be in accordance with the approved Terms of Reference.

Environmental Site Screening Questionnaire
A copy of the Environmental Site Screening Checklist is attached within Appendix D. Applicants should contact Halton Region for historical data and any environmental records. In accordance with the protocol for contaminated sites, the possibility of site contamination may result in a required Phase 1 Environmental Assessment, Phase 2 Environmental Assessment and/or Record of Site Condition.

Financial Impact Study
A Financial Impact Study generally evaluates the growth-related financial impacts of development in a coordinated and consistent manner, including impacts on capital and operating municipal services, and the estimated cost and timing of capital infrastructure.

Functional Servicing Report / Study
Functional servicing studies address a number of engineering issues. There are separate terms of reference for Functional Servicing Studies related to lands north or south of Dundas Street.

Geotechnical / Soils Report
This report analyses soil composition to determine its structural stability and its ability to accommodate development.

Grading & Drainage Plan
A plan that illustrates how a property drains and how the grades of a property are directing stormwater.

Landscape Plan and Landscape Details
A plan that identifies the proposed landscaping design for a property including illustration of the natural features, planting scheme, plant materials, paving, lighting, and irrigation system, among other elements. The Landscape Details Plan illustrates the specifications for planting and installation of landscaping features.

Map and Accompanying Table Showing Densities and Designations
The map should clearly show the designation of all blocks and lots (i.e. Sub-urban, General Urban, Neighbourhood Centres, and/or Urban Core). The accompanying table must provide the density calculations on a net hectare basis.

Market Impact Study
The purpose of a market impact study is to address the existing market and potential impacts of an application. These studies will be evaluated by the Town on the basis of a peer review to be undertaken at the applicant"s expense.

Noise and Vibration Report
A noise and/or vibration study determines the impact on adjacent developments and recommends mitigation measures.

Park / Open Space Concept Plan
Required for any application where all or part of a new Town park or addition to a Town park is included as part of the proposal. The required facilities and standards are available from the Parks and Open Space Department.

Pavement Marking and Signage Plan
A plan that identifies how driveway and pedestrian areas will be signed and/or marked for travel.

Pedestrian Circulation Plan
Pedestrian circulation drawing should outline the following: Nodes/Activity Centres/Open Space/Transit Facilities; Barriers; Landmarks/Focal Points; Edges; Residential Land Use Areas; Proposed Densities; and, Street Pattern.

Planning Justification Report / Letter
For all applications, a qualified planner must submit a report providing planning justification for the proposal based on the principles and objectives of Provincial, Region and Local planning documents.

Planning Statistics Spreadsheet
In submitting a complete application, the applicant must complete the North Oakville Planning Statistics spreadsheet that can be downloaded from the Town"s website and submitted in an electronic form.

Site Plan and Site Plan Details
A Site Plan illustrates the technical details of a project including vehicle and pedestrian access, detailed measurements of building footprints and setbacks from property lines, parking areas, and drive aisles among other elements. The Site Plan Details provide the specifications of various elements on the site.

Site Servicing Plan
A plan that illustrates the location of underground or overhead services and where they are entering the property, their area of placement and how they will be accessed.

Stormwater Management Study / Report
Stormwater Management Reports address a number of engineering issues. There are separate terms of reference to Functional Servicing Studies in North Oakville and South Oakville.

Streetscape Plan
A plan that identifies how the area of the property in the private realm will integrate with the existing or proposed streetscape design in the public realm. The plan generally needs to identify paving and planting materials, including measurements and cross-sections.

Survey / Legal Plan
Current survey prepared by a qualified Ontario Land Surveyor that includes the location and nature of any easement affecting the subject land.

Sustainability Checklist
The Sustainability Checklist is used for assessing, encouraging and evaluating the features of a development application that contribute to sustainable development.

Transit Facilities Plan
The Transit Facilities Plan addresses transit facilities in the planning of subdivisions and their integration into the transit network. The Plan includes a number of components that must be submitted at different stages in the Planning Process. The initial component must be submitted in conjunction with a Functional Servicing Study. Please refer to the North Oakville Transit Plan.

Transportation Impact Study
These can be required by Town or Regional staff. Contact the Town"s Development Services Department staff (Town roads) or Regional Public Works staff (Regional roads) for background information.

Tree Vegetation Study and Tree Protection Plan
A tree survey must be prepared by a qualified professional, identifying all existing trees, their type, size and condition, those trees proposed to be removed and retained, and the methods to be used to ensure preservation of those trees to be retained. In some cases, only a Tree Inventory Plan will be sufficient, and at the discretion of Town staff.

Truck Turning Plan
This Plan illustrates how delivery trucks and/or garbage trucks will load and unload materials on the site and the location of travel through the site.

Urban Design Brief
The purpose of the Urban Design Brief is to illustrate a detailed design solution for new development based on a thorough contextual analysis of the site and the surrounding area.

Wind Study/Microclimate
A wind study is a technical document that provides a model and written description of the impact of pedestrian-level winds associated with development on adjacent streets, parks and open spaces. These studies are done to evaluate the impact of the wind conditions at various times of the year.

OAKVILLE

Information Requirements for Plans of Subdivision or Condominium

Subsection 51(17) Requirements:

- the boundaries of the land proposed to be subdivided certified by an Ontario Land Surveyor
- the locations, widths and names of the proposed highways within the proposed subdivision and of existing highways on which the proposed subdivision abuts
- on a small key plan, on a scale of not less than one centimetre to 100 metres: all adjacent land owned by the applicant or in which the applicant has an interest, all of the land adjacent to the proposed subdivision that is owned by the applicant or in which the applicant has an interest, every subdivision adjacent to the proposed subdivision and the relationship of the boundaries of the land to be subdivided to the boundaries of the township lot or other original grant of which the land forms the whole or part
- the purpose for which the proposed lots are to be used
- the existing uses of all adjoining lands
- the approximate dimensions and layout of the proposed lots
- natural and artificial features such as buildings or other structures or installations, railways, highways, watercourses, drainage ditches, wetlands and wooded areas within or adjacent to the land proposed to be subdivided
- the availability and nature of domestic water supplies
- the nature and porosity of the soil
- existing contours or elevations as may be required to determine grade of highways and drainage of proposed lands to be subdivided
- the municipal services available or to be available to the land proposed to be subdivided
- the nature and extent of any restrictions affecting the land proposed to be subdivided, including restrictive covenants or easements

Other Information Requirements:

- legend, map scale, north marker
- boundary of property to be subdivided
- lot and concession/registered plan number/street address
- date prepared and dates of revisions
- name and person or firm who prepared the plan
- owner's name, signature and date of signature*
- Ontario Land Surveyor's name and signature and date of signature
- Site statistics (land use, number of lots/blocks, total area)
- Conceptual trail system through public open space areas and/or the Natural Heritage System. The final plan is to be in keeping with any applicable approved Environmental Implementation Report/Functional Servicing Study to the satisfaction of the Town

* All registered owners must sign. If there is more than one owner, a letter of authorization is necessary allowing one person to act on behalf of the others. If any registered owner fails to sign or provide authorization, the application will be considered incomplete and will be returned.

Planning & Public Works
Tel: 905-825-6000 Fax: 905-825-8822
Toll Free: 1-866-4HALTON (1-866-442-5866)
www.halton.ca

Environmental Site-Screening Questionnaire

Legal/Municipal Address_____ **Applicant:**_____

1.	Was the subject property ever used for industrial purposes?	☐ yes	☐ no	☐ uncertain
2.	Was the subject property ever used for commercial purposes that may have caused contamination (e.g. gasoline station, dry cleaners, etc.)	☐ yes	☐ no	☐ uncertain
3.	Has fill ever been placed on the property?	☐ yes	☐ no	☐ uncertain
4.	Is there any reason to believe that the subject property is potentially contaminated based on historic use of the property or a neighbouring lot located within 100m of the property?	☐ yes	☐ no	☐ uncertain
5.	Are there or were there ever any above-ground or underground storage tanks or waste disposal activities on the property?	☐ yes	☐ no	☐ uncertain
6.	For existing or previous buildings on the property, are there building materials that may be potentially hazardous to human health (i.e. asbestos, lead-based paints, etc.)?	☐ yes	☐ no	☐ uncertain
7.	For agricultural properties, were pesticides or herbicides ever applied to the property?	☐ yes	☐ no	☐ uncertain
8.	Have any of the buildings on the property been heated by fuel oil?	☐ yes	☐ no	☐ uncertain
9.	Is the land use changing to a more sensitive land use (e.g. industrial/ commercial to residential/institutional)? Note: Daycare uses are defined in O.Reg.153/04 as institutional.	☐ yes	☐ no	☐ uncertain

General Information:

1.	Have any environmental documents (e.g. Phase I and II Environmental Site Assessments, Records of Site Condition, etc) ever been prepared for the property? If yes, please submit these documents in digital and hardcopy format with your application together with a letter of reliance granting third party reliance on the documents to the Region of Halton.	☐ yes	☐ no

Certification

I,_____ am the registered owner of the land that is the subject of this document and to the best of my knowledge, the information provided in this questionnaire is true.

Sworn (or declared) and stamped before me _____
Commissioner of Oaths (Print Name)

in the_____, this_____ day of_____ 20____
City/Town/Municipality Day Month Year

_____ _____
Commissioner of Oaths (Signature) Registered Owner (Signature)

MEMORANDUM

TO:

Gus Sarantopoulos
IGP Realty Advisors
19 Galsworthy Ave
Scarborough, Ontario M1R 2N5

FROM:	PROJECT:	DATE:
Tim Arnott	8223-21	February 19, 2025
Justin Kwok	845 Burloak Dr – Gas Bar Addition	

RE: 845 BURLOAK DRIVE - PROPOSED ADDITION TO PETRO CANADA GAS BAR [DRAFT]

1.0 INTRODUCTION

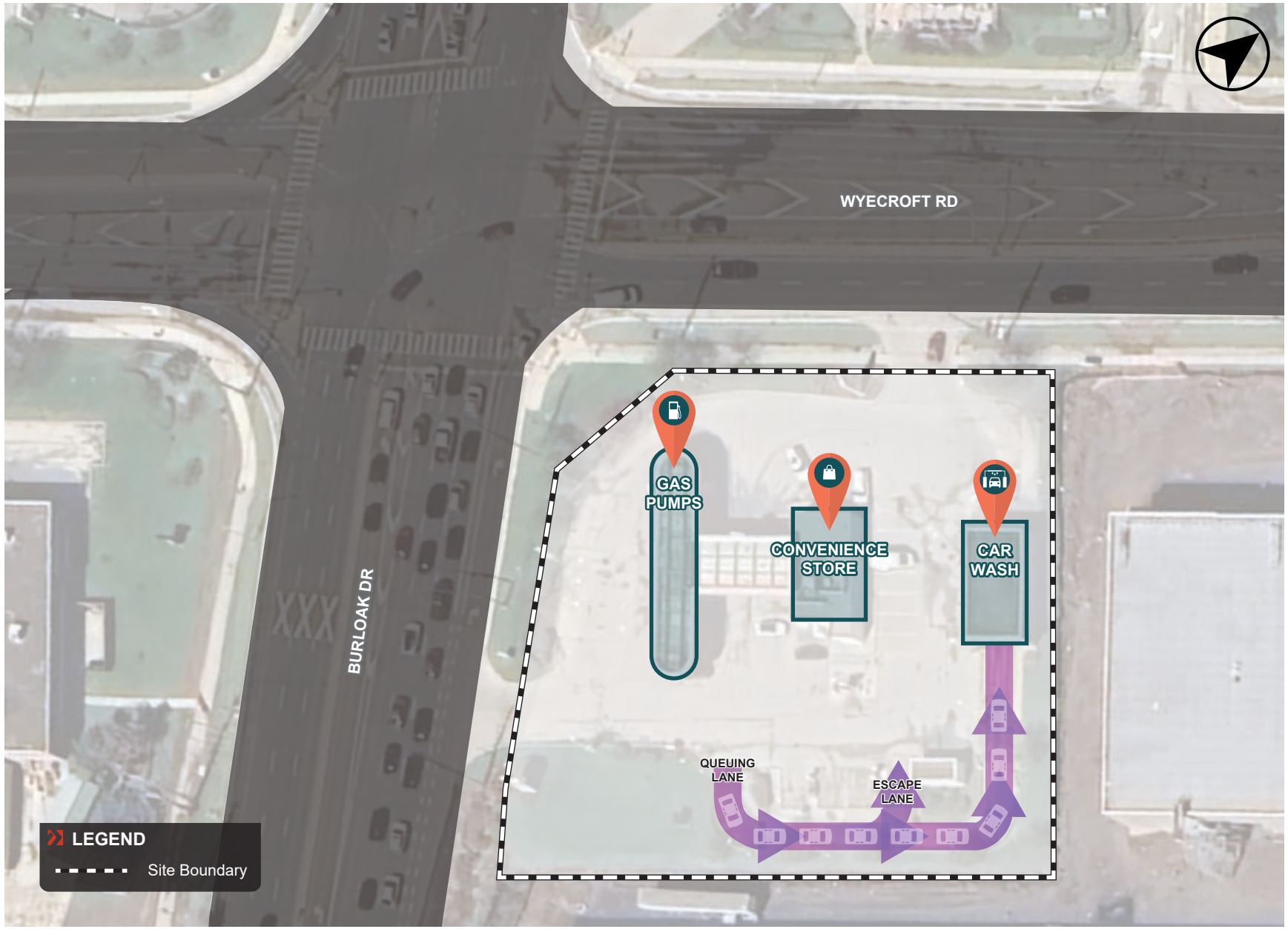
BA has been retained by IGP Realty Advisors Inc. to provide transportation consulting services to assess the impacts of the addition of an A&W drive-through to an existing Petro-Canada gas station (the "Site") located at 845 Burloak Drive in the Town of Oakville. The Site is at the southwest corner of Wyecroft Road and Burloak Drive.

This transportation impact brief assesses the impacts of redevelopment of an existing gas bar with eight (8) gas pump positions on-site to add a proposed quick service restaurant (A&W) drive through. The assessment focuses on the forecast traffic demand associated with the new drive through using proxy gas bar sites with similar locational characteristics. Furthermore, the study will review the appropriateness of the proposed Site configuration at the site driveways and with respect to internal circulation to support the expected demand of these proposed services on site.

The existing Site contains a gas bar with 8 self-service pumps, an attached convenience store and a separate automatic car wash facility (Glide Auto Wash) as illustrated in **Figure 1**. The existing Site have two access driveways – one each onto Burloak Drive and onto Wyecroft Road. Located in Oakville, the Site is located within 300 metres from the closest Highway 403 interchange and is bounded by Burloak Drive to the west and Wyecroft Road to the north.

1.1 Study Terms of Reference

A terms of reference has been provided to the Town of Oakville and Halton Region via email in relation to this traffic impact study brief submitted in support of the proposed addition of the A&W drive through use to the Site. The terms of reference and subsequent correspondence confirming the TIS scope is acceptable is attached in **Appendix A**.



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Aerial maps provided courtesy of: Esri, DigitalGlobe, GeoEye, Earthstar Geographies, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, the GIS User Community and/or Google Earth/Maps.

FIGURE 1 SITE LOCATION & CONTEXT

2.0 TRANSPORTATION CONTEXT

2.1 Existing Site Context

Based on a review of recent aerial photography, area turning movement counts and demographic information from the 2022 Transportation Tomorrow Survey (TTS), a summary of the site characteristics is presented in **Table 1**. The approximate population living within a kilometre radius of the Site (i.e., Zonal Population) as found from TTS 2022 data, is in the order of 9,788 people and approximately 8,655 jobs in the area.

Table 1 Site Characteristics Summary

Address	Municipality	# Gas Pumps Station	Zonal Population	Proximity to Interchange	Adjacent Traffic Flow
845 Burloak Drive	Town of Oakville	8	9,788 (18,443)[2]	300 m	Low

Notes:
1. Information based on 2006 TTS zones 4002, 4076, 4077, reflecting 40% of each zone.
2. Reflects the combined employment and population.

Table 2 summarizes the findings from the review of the existing site. The Site experiences the peak activity on the Saturday peak hour, with 87 gas bar arrivals and 7% of adjacent road traffic entering the Site, whereas the weekday AM and PM peak hours are lower with 2% and 5% respectively. This discrepancy is likely due to the presence of the retail area along Wyecroft Road on the north side of Wyecroft Road east of the site that generates greater adjacent street traffic during the Saturday peak period that pass-by the subject gas bar.

Table 2 Existing Gas Bar Demand Summary

	AM Peak	PM Peak	SAT Peak
	8:00-9:00 AM	**4:45 – 5:45 PM**	**4:00 – 5:00 PM**
Wyecroft Road – EB	135	648	491
Burloak Drive - NB	413	654	821
Adjacent Traffic[1]	**548**	**1302**	**1312**
Gas Bar Two-way Traffic	23	132	171
Gas Bar Arrivals	12	63	87
Gas Bar Exits	11	69	84
% Adjacent Traffic[2]	**2%**	**5%**	**7%**

Notes:
1. Based on through corridor movements at the west driveway along Burloak Drive and the north driveway along Wyecroft Road.
2. Calculated relative to the gas bar arrivals

2.2 Future Network Changes

Within the site vicinity, Wyecroft Road currently terminates in a dead end to the east of the Site, leading to a number of large big box retail and other business park uses. Under future conditions, Halton Region plans to extend Wyecroft Road east to connect through to Bronte Road, thereby creating a secondary local through corridor connecting the business uses south of Highway 403 within west Oakville. This connection is expected to increase through traffic along Wyecroft Road as the current dead end condition would mean existing Wyecroft Road volumes reflect only local retail traffic. The area context is illustrated in **Figure 2**.

For the purposes of this assessment, a conservative 150 to 300 vehicles are added to the eastbound to reflect new through traffic between Burloak Drive to Bronte Road. Based on this expected increase of traffic on Wyecroft Road, the gas bar activity is also expected to increase as the pass-by to the gas bar are drawn partially from Wyecroft Road. The forecast gas bar activity is summarized in Table 3.

Table 3 Future Gas Bar Demand Summary

	AM Peak	PM Peak	SAT Peak
	8:00-9:00 AM	4:45 – 5:45 PM	4:00 – 5:00 PM
Wyecroft Road – EB	285	948	641
Burloak Drive - NB	413	654	821
Adjacent Traffic[1]	**698**	**1602**	**1462**
% Adjacent Traffic	2%	5%	7%
Future Gas Bar Arrivals	14	80	102
Existing Gas Bar Arrivals	12	63	87
New Gas Bar Arrivals	**2**	**17**	**15**
Existing Gas Bar Exits	11	69	84
Future Gas Bar Exits	13	86	99

Based on application of the existing observed interaction ratio of the gas bar activity to adjacent street traffic, the expected traffic growth along the Wyecroft Road corridor will increase the Site arrivals by 2, 17 and 15 trips during the weekday morning, afternoon and Saturday peak hours, respectively.

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Aerial maps provided courtesy of: Esri, DigitalGlobe, GeoEye, Earthstar Geographies, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, the GIS User Community and/or Google Earth/Maps.

FIGURE 2 AREA CONTEXT

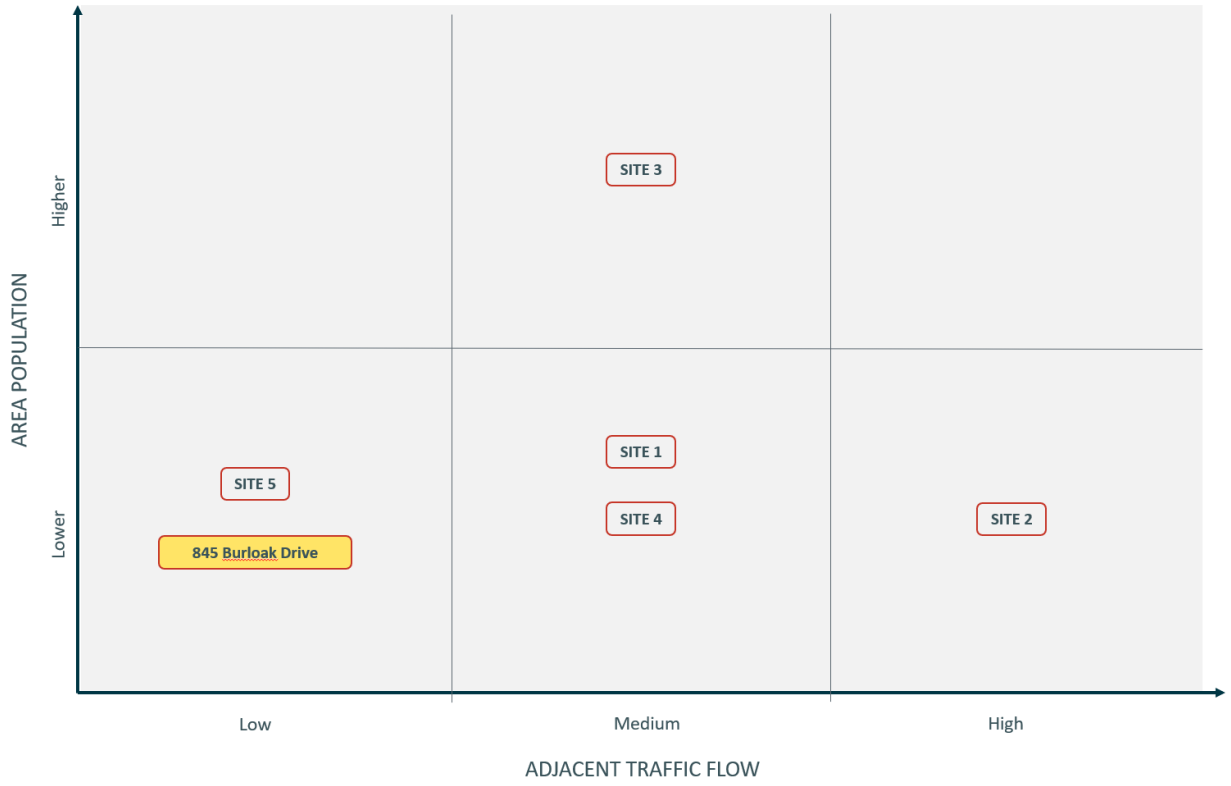
3.0 PROPOSED SITE

The proposed Site redevelopment will maintain the current 8-pump positions, the existing convenience store building and car wash facility. A new A&W drive-through restaurant is proposed within the current convenience store building on the site by remodelling the northeast portion of the building. The proposed site plan illustrates 16 vehicle parking spaces including 1 accessible space directly in front of the convenience/A&W building (including 3 staff parking spaces that will be blocked by the fuel tanker when refueling), in addition to 3 vacuum spaces. Two site driveways will be maintained – one via Burloak Drive and one via Wyecroft Road. All driveway will operate with right-in right-out only restrictions. The site plan for the proposed redevelopment is attached in **Appendix B**.

A traffic demand and queuing analysis has been conducted with respect to other gas bar sites to compare and contrast how the variety of gas bar services (i.e., gas pumps and A&W drive through) function under different locational characteristics. This study can be referenced in **Appendix C** for further review. This study examines 5 different gas bar sites with A&W drive-throughs, car wash services and convenience store use in various zonal population areas and levels of adjacent traffic flow conditions.

845 Burloak Drive is classified as a 'Low Traffic Flow and 'Low Area Population' site within the context of the proxy study sites, thus placing it in the same category as proxy site 5 (i.e., 3100 Ellesmere Road). This classification will aid in forecasting future traffic conditions and general interactions between adjacent roads and the gas bar. The subject site is expected to exhibit the same characteristics as proxy site 5 with respect to total gas bar traffic relative to adjacent street traffic, and the level of this activity that is related to the A&W drive-through operations. Due to the increase in total fueling pumps in the proposed Site, ITE trip gen rates will be considered to factor an increase in traffic in tandem with the proxy site information.

Figure 3: Site Classification



4.0 SITE PLAN REVIEW

The proposed site plan has been reviewed, as per drawings provided in **Appendix D**:

- B-train tanker can enter the Site from Wyecroft Road to the fuel storage and exit onto Burloak Drive (or vice versa) with forward movement only (see VMD-1 and VMD-2 in **Appendix D**).
- Heavy single unit (HSU) delivery vehicles and overhead refuse collection vehicles can manoeuvre into and out of the loading space provided adjacent to the double refuse from the Wyecroft Road and to the Burloak Drive driveways. (see VMD-3 and VMD 4 in **Appendix D**); and
- Passenger vehicles can manoeuvre through the A&W drive-through aisle appropriately and have appropriate circulation around the gas bar canopy and car wash stacking lane. Passenger vehicles can enter or exit the Site appropriately from both driveways (see VMD-5 in **Appendix D**)

Based on these turning movement diagrams, all design vehicles that would frequent the Site on a regular basis can be appropriately accommodated (i.e., forward in/forward out manoeuvring) by the proposed reconfiguration of the Site, taking into account the proposed A&W drive-through operations and the reconfigured gas-pumping positions.

4.1 Parking Review

The Town of Oakville Zoning Bylaw 2014-014 non-residential regulations apply regarding the motor vehicle fueling station and its accessory uses. The prevailing zoning bylaw excerpt is attached in **Appendix E**. Parking requirements for the current proposal is summarized in **Table 4** for each individual component land use after redevelopment. Based on the application of these parking rates, the proposed gas bar development would require at least 2 to 10 parking spaces of which at least 1 must be a barrier-free space.

Table 4 Oakville Zoning Bylaw 2014-014 Section 3.1.2.2 Parking Requirements

Use	Minimum Parking Rate	Parking Requirement[1]
Convenience Store (42.7 m^2 GFA)	1 space / 18 m^2 GFA	3 spaces
Motor Vehicle Washing Facility (134.5 m^2 GFA)	1 space / 100 m^2 GFA	2 spaces
A&W Drive Through Only Restaurant (43.2 m^2 GFA)[2]	1 space / 10 m^2 GFA	5 spaces
Total Spaces Required	--	**10 spaces**
Barrier Free Spaces[3]	--	**1 space**

Notes:
1. Reflects rounding provisions in Section 5.1.5
2. GFA based on site plan statistics dated July 23, 2024.
3. Based on provision in Zoning Bylaw 0117-2022 Section 5.3.1

The proposed site plan illustrates 16 vehicle parking spaces, including 1 accessible parking space and 3 staff only parking spaces that overlap with the gas bar fuel tanks. In addition, 3 vacuum spaces are provided along the south side of the site. The staff only spaces will be blocked during fuel deliveries. The proposed vehicle parking on site will exceed the Oakville Zoning Bylaw parking requirements (i.e 10 spaces) for the new A&W drive through and the existing uses on site.

4.2 Stacking Lane Review

Section 5.5.2 in Zoning Bylaw 2014-014 provides requirements for the minimum number of vehicle stacking spaces for the proposed A&W drive-through restaurant. Based on provisions in Table 5.5 within the bylaw, the proposed restaurant drive through requires 10 vehicle stacking spaces with 7 spaces prior to the order station. For the existing car wash, 8 vehicle stacking spaces are required at the entrance and 2 vehicle stacking spaces are required at the exit to the car wash.

Based on a review of the proposed site plan, approximately 5 vehicle queuing spaces are provided from the pick-up window to the drive through entrance for the restaurant with 2 of those stacking spaces located prior to the order station. 10 vehicle stacking spaces are provided before the entrance to the car wash and 2 vehicle spaces outside the exit.

The proposed A&W drive through stacking lane will be short of the zoning bylaw requirements. However, it will be sufficient to meet the anticipated demand and resultant queueing potential for an A&W based on the observed queuing potential at other A&W drive throughs at a gas station as discussed in Section 5.2. The proposed and existing car wash stacking lane will meet the zoning bylaw requirements.

4.3 Loading Review

Per Section 5.6 in Zoning Bylaw 2014-014, there is no loading space requirement. However, where a loading space is provided, the minimum dimensions of the loading space must be 3.5 metres in width by 12.0 metres in length. The proposed provision of 1 loading space for the site adjacent to the double refuse bins is functional and appropriate. This loading space is effectively 12 metres by 6 metres in dimension which meets the minimum loading space dimensions required in Zoning Bylaw 2014-014.

During loading operations, it is noted that the escape lane closer to the entrance of the car wash would be blocked. However, the car wash has a second escape lane just west of the loading area escape around the loading activity should it be concurrent.

5.0 SITE TRAFFIC OPERATIONS REVIEW

5.1 Overall Gas Bar Demand Forecast

As outlined in **Table 2**, there is some interaction between the adjacent road traffic and the gas bar, particularly for the weekday afternoon and Saturday peak hours, with a 2%, 5%, and 7% interaction during the weekday morning, afternoon, and Saturday peak hours, respectively. The proposed new A&W drive through within the existing convenience store building on site is expected to increase the gas bar activity with some portion doing both (i.e. getting gas and visiting the A&W drive through). The demand reflecting the proposed A&W drive through was forecast by applying the capture ratios of overall gas bar arrivals for the proxy A&W sites to the forecast gas pump traffic by peak hour.

Table 6 provides a summary of the forecasted demand for proposed A&W drive through. The new A&W restaurant can be forecasted based on the A&W capture rate of the total gas bar arrivals at 3100 Ellesmere (i.e., 1% to 4% depending on time period). Assuming this capture rate for the proposed A&W drive through, it is anticipated to have drive-though demand of 1 to 5 new vehicles. This estimate accounts for the increase in gas bar activity due to higher volumes on Wyecroft Drive, with its connection to Bronte Road, and interaction between the gas pumps and the drive through. Due to the low trips forecasted for the A&W, the interaction between the A&W and gas pumps (i.e., trips that are already part of the original gas bar traffic) are negligible.

The Site will see a minor overall increase in traffic activity due to the new A&W drive-through, in the order of 0 to 8 two-way trips (i.e. arrivals of 0 to 4 vehicles) during the weekday morning, afternoon, and Saturday peak hours. This minor level of traffic increase can be accommodated on the site driveways and will not noticeably impact the surrounding area intersections.

Table 5 Future Gas Bar Traffic Forecast

	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
	In	Out	In	Out	In	Out
Forecast Site Total	14	13	80	86	102	99
Assumed A&W Capture Rate of Total Gas Bar Arrivals[2]	*1%*		*4%*		*4%*	
Total A&W Arrivals[3]	1	1	4	4	5	5
Interaction between A&W and Gas Pump[4]	*1%*		*5%*		*11%*	
A&W – Gas Pump Interaction	0	0	0	0	0	0
Net New A&W Arrivals	0	0	3	3	4	4
Future Site Traffic[5]	**14**	**13**	**83**	**89**	**106**	**103**

Notes:
1. The redeveloped gas bar will maintain the existing 8 gas bar positions.
2. Capture rates reflecting A&W drive-through traffic out of gas bar arrivals are based on the observations at 3100 Ellesmere – proxy site 5
3. Trips rounded up to the next whole number
4. Reflects proportion of A&W trips that also get gas at the pumps (i.e., they are already part of the original gas bar traffic)
5. Reflects forecast gas bar traffic plus new A&W drive through traffic.

5.2 A&W Drive Through Operations

The proposed drive through at the A&W can accommodate 6 vehicles from the pick-up window to the entrance of the drive through. The traffic forecasting for the A&W drive through estimate in the order of 4 vehicle or less hourly arrivals during the peak hours. Through the queue study in **Appendix C**, it was observed that the maximum A&W drive through queuing at the proxy site with similar levels of demand (i.e. 3100 Ellesmere) was 1 vehicle.

The proposed queuing provision has sufficient storage to support the anticipated demand for the A&W drive through, avoiding spillback into the gas bar to maintain unobstructed circulation and vehicle manoeuvring within the Site. Should there be scenarios where the A&W experience additional traffic, the 6-vehicle queuing storage will still be sufficient to serve the maximum queue observed across all the proxy A&W drive-throughs (i.e. 5 vehicles in queue), some of which with much greater A&W demand and adjacent street traffic than the subject Site. Therefore, the queueing capacity for the proposed A&W drive through operation will sufficiently accommodate the forecast queuing on-the Site.

Table 6 A&W Drive Through Queue Comparison with Demand

Proxy Site	Site 1	Site 2	Site 3	Site 4	Site 5	845 Burloak Drive
A&W Traffic	5 / 19 / 13	6 / 8 / 5	10 / 18 / 12	8 / 18 / 17	1 / 6 / 5	1 / 4 / 5
Service Time Order Pickup	 1:01 1:34	 0:54 1:05	 1:07 1:22	 1:14 1:50	 1:20 2:48	 --
Max Queue Observed	3	2	5	1	1	**~ 1**

Notes:
1. xx / xx / xx – AM Peak Hour / PM Peak Hour / SAT Peak Hour
2. Reflects the higher of Friday and Saturday observed average order and pick up dwell times.
3. Arrival values based on the hours starting at 8:00 AM, 3:30 PM, and 4:00 PM for AM Peak Hour, PM Peak Hour, and SAT Peak hour, respectively.

6.0 CONCLUSIONS

The proposed development to add an A&W drive through to the convenience store building of an existing gas bar with 8 gas pump stations is expected to produce an increase of total traffic to and from the Site by approximately 2 to 10 two-way vehicles during the peak hours. The proposed storage length of approximately 6 vehicles from the pick-up window for the A&W drive through facility is sufficient to accommodate anticipated queuing for the A&W drive through operations. The proposed site plan is appropriately configured to functionally accommodate all design vehicles that are anticipated to frequent the Site on a regular basis.

The redevelopment of the existing Petro-Canada gas station and drive-through facility located 845 Burloak Drive in the Town of Oakville can be appropriately accommodated without noticeable impact on the operating conditions of either Burloak Drive or Wyecroft Road. In fact, the future extension of Wyecroft Road from Burloak Drive to Bronte Road will result in a much more significant change to the traffic volumes on Wyecroft Road and pass-by traffic potential to and from the Site.

Appendix A:
Terms of Reference

From: Paul Barrette
To: "Vasili Sarantopoulos"; Darren Dabideen; Syed Rizvi; Nick.Challis@halton.ca
Cc: Nikita Mirshahi; Justin Y. Kwok
Subject: RE: [EXTERNAL] RE: 845 Burloak Dr - TIS Terms of Reference
Date: November 8, 2024 4:09:15 PM

Hi Everyone,

The approach we discussed at the pre-con was for the SPA application to be submitted showing the deficiencies in stacking, the SPA submission would be reviewed, including justification for the reduction of stacking, then once the foregoing and other site plan matters are largely sorted out a MV would be applied for prior to final SPA so it accurately captures the zoning deficiencies.

Paul

Paul Barrette, MCIP, RPP
Manager - Planning Current Planning-West District
Planning & Development
Town of Oakville | 905-845-6601, ext. 3041 | www.oakville.ca

From: Vasili Sarantopoulos <Vasili@igpadvisors.ca>
Sent: Thursday, November 7, 2024 3:59 PM
To: Darren Dabideen <darren.dabideen@oakville.ca>; Syed Rizvi <syed.rizvi@oakville.ca>; Nick.Challis@halton.ca; Paul Barrette <paul.barrette@oakville.ca>
Cc: Nikita Mirshahi <Nikita@igpadvisors.ca>; 'Justin Y. Kwok' <kwok@bagroup.com>
Subject: RE: [EXTERNAL] RE: 845 Burloak Dr - TIS Terms of Reference

Hey Darren,

Could you provide a bit of clarity on this – I was under the assumption here, based on my conversation with @Paul Barrette that we would go in for the first submission, and the city would identify any deficiencies prior to us applying for any Minor Variances. Is this not the case? We really need some clarity here on the process. I'm being told multiple different things.

Best,

Vasili Sarantopoulos
Project Manager
416-414-4901
Vasili@igpadvisors.ca

From: Darren Dabideen <darren.dabideen@oakville.ca>
Sent: November 7, 2024 2:32 PM
To: 'Justin Y. Kwok' <kwok@bagroup.com>; Syed Rizvi <syed.rizvi@oakville.ca>; Nick.Challis@halton.ca
Cc: Vasili Sarantopoulos <Vasili@igpadvisors.ca>; Nikita Mirshahi <Nikita@igpadvisors.ca>
Subject: RE: [EXTERNAL] RE: 845 Burloak Dr - TIS Terms of Reference

Good afternoon Justin,

I can confirm that your TIS does not comply with the Zoning Bylaw it does not meet the minimum requirements under the 2014-014 Zoning Bylaw for "stacking lanes".

Darren Dabideen
Zoning Plans Examiner
Building Services

From: Justin Y. Kwok <kwok@bagroup.com>
Sent: Thursday, November 7, 2024 1:46 PM
To: Syed Rizvi <syed.rizvi@oakville.ca>; Darren Dabideen <darren.dabideen@oakville.ca>; Nick.Challis@halton.ca
Cc: Vasili Sarantopoulos <Vasili@igpadvisors.ca>; Nikita Mirshahi <Nikita@igpadvisors.ca>
Subject: [EXTERNAL] RE: 845 Burloak Dr - TIS Terms of Reference

Hi Syed, Darren and Nick,

Please see the below correspondence a week ago for the purposes of a terms of reference in relation to the Site Plan Application for 845 Burloak Drive. Can you confirm receipt of this and provide comments or confirmation of acceptance in regards to the below proposed TIS works for the site?

Thanks,

Justin Y. Kwok, M.EngCEM
Associate

BA Consulting Group Ltd.

95 St. Clair Avenue West, Suite 1000 | Toronto
416 961 7110 x147 | kwok@bagroup.com

BA Consulting Group Ltd.

From: Justin Y. Kwok
Sent: October 30, 2024 8:37 PM
To: syed.rizvi@oakville.ca; darren.dabideen@oakville.ca; Nick.Challis@halton.ca
Cc: Vasili Sarantopoulos <Vasili@igpadvisors.ca>
Subject: 845 Burloak Dr - TIS Terms of Reference

Hi Syed, Darren and Nick,

We have been retained by IGP to provide transportation advisory services in relation to the Site Plan Application for the 845 Burloak Dr site. For convenience, I have attached the proposed site plan here. It should be noted that the only additional use and change to the site in the proposal is an A&W drive through only restaurant inside the existing convenience store building (i.e. no interior seating is proposed). Given that a gas bar and amenities is expected to generate primarily pass-by trips, we expect only a TIS brief to be necessary for this site plan application instead of a full TIS. This email is to set and confirm the proposed terms of reference for the transportation impact assessment for this SPA.

TERMS OF REFERENCE

The Site is an existing gas bar the southeast corner of Wyecroft Road and Burloak Drive. The gas bar has eight (8) gas pump positions, an ancillary convenience store and an automatic car wash facility. The proposal will add a drive through only A&W restaurant into the existing convenience store building and an associated drive through lane.

It is noted that the TIA is intended to review travel demands generated by the development and, if necessary, recommend mitigation measures to address these demands. As an ancillary convenience restaurant use within an existing gas bar, the proposed development traffic is expected to be in the order of 90% pass-by trips (especially since there will be no interior seating) and will not generate significant traffic that wasn't already on the network. Given the nature of pass-by trips, traffic impact on surrounding

area intersections will be minimal and so **traffic forecasting and operational assessment will be evaluated at the site driveway intersections and within the site internally**. Synchro capacity assessment will be provided at the site driveway intersections and queuing potential for the car wash and proposed A&W drive through will be reviewed to determine an appropriate stack lane provision for the proposed uses.

Parking and loading requirements for the site will be reviewed based on the appropriate zoning bylaws for the site and empirical parking demand observed at the existing site. The site plan will be reviewed to provide an appropriate parking and loading supply, a functional parking layout, on-site circulation and driveway maneuverability for all vehicles (i.e. passenger, HSU truck and B-train tanker) that will frequent the site. The proposed drive-through queuing storage for the car wash, fast-food and commercial facilities will be reviewed for adequate length to support the observed empirical demand and queues for these uses.

Traffic forecast for the gas bar and on-site uses will be derived based on a review of traffic generation surveyed at various Petro Canada gas bars across the GTA that has similar locational characteristics (i.e. adjacent street traffic levels, area population, proximity to highway interchange, etc) as the proposed site. Expected arrivals for the car wash, and the A&W drive-throughs will be estimated based on observed proportions of these auxiliary uses relative to the total gas bar activity at other proxy gas bar sites that also have an on-site car wash and A&W. The resultant traffic demand will be used to determine the expected drive-through queues for the proposed uses.

Please let me know your thoughts and comments.

Thank you,

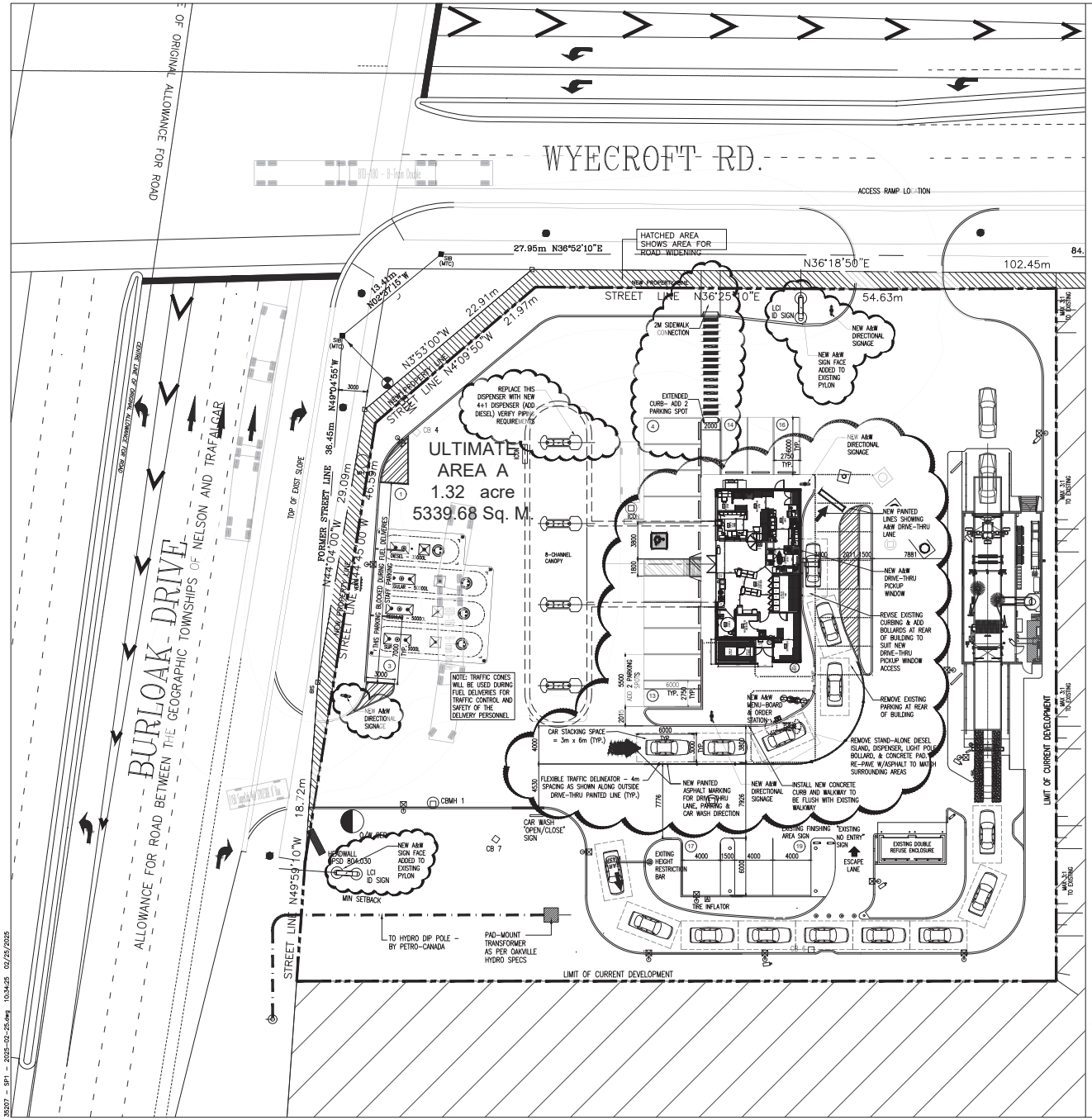
Justin Y. Kwok, M.EngCEM
Associate

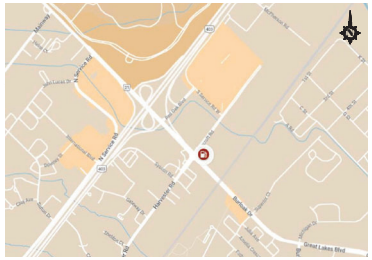
BA Consulting Group Ltd.

95 St. Clair Avenue West, Suite 1000 | Toronto
416 961 7110 x147 | kwok@bagroup.com

BA Consulting Group Ltd.

Appendix B:
Proposed Site Plan





SURVEYOR'S REAL PROPERTY REPORT
PART 1) PLAN OF

PART OF LOT 35
CONCESSION 3
SOUTH OF DUNDAS STREET

GEOGRAPHIC TOWNSHIP OF TRAFALGAR
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON

SITE INFORMATION				
ADDRESS: 845 BURLOAK DRIVE, OAKVILLE, ONTARIO				
ZONE: E4 BUSINESS COMMERCIAL				
	PROPOSED AREA: SQ.M.	EXISTING AREA: SQ.M.	AREA: ACRES	% OF TOTAL LOT AREA
TOTAL LOT AREA		22,006.3 M²	5.4379	100%
TOTAL DEVELOPED LAND AREA		5,339.7 M²	1.3195	24%
TOTAL BUILDING AREA	148.7 M²	148.7 M²		.68%
C-STORE GFA	42.7 M²	99.5 M²		
A&W GFA	43.2 M²	NA		
CAR WASH	134.5 M²	134.5 M²		.61%
CANOPY COVERAGE	354.3 M²	354.3 M²		1.61%
	PROPOSED	EXISTING		
BUILDING HEIGHT - CANOPY:	5.50 M	5.50M		
BUILDING HEIGHT - STORE:	4.39 M	4.39 M		
BUILDING HEIGHT - CAR WASH:	4.63 M	4.63 M		

PARKING				
	MINIMUM REQUIRED	REQUIRED	EXISTING	PROPOSED
CAR WASH	1 PARKING SPACE FOR EACH 100 SQUARE METRES OF NET FLOOR AREA 134.5/ 100 = 1.345 = ROUNDED UP TO 2	2	3	3 PARKING/ VACUUM (+ 10 CARS STACKING)
C-STORE	RETAIL: 1 PARKING SPACE FOR EACH 18 SQUARE METRES OF NET FLOOR AREA 42.7/ 18 = 2.37 = ROUNDED UP TO 3 SERVICE STATION: 1 PARKING SPACE FOR EACH 100 SQUARE METRES OF NET FLOOR AREA 13.6/ 100 = 0.13 = ROUNDED DOWN TO 0	3	15	7 INCLUDING 1- HANDICAP & 3 PARALLEL STAFF PARKING
A&W	1 PARKING SPACE FOR EACH 10 SQUARE METRES OF NET FLOOR AREA 43.2/ 10 = 4.32 = ROUNDED UP TO 5	5	NA	9 PARKING (+ 8 CARS STACKING)
TOTAL:		10	18	19
LOADING SPACE PROVIDED				
C-STORE & A&W	5.5M x 12M	NA	1	1

ISSUED

NO.	DATE	DESCRIPTION
01	MMM DD/YY	ISSUE DESCRIPTION

REVISION

1	2024-07-23	REVISED MENU-BOARD LOCATION, DRIVE-THRU STACKING AND STORE/FRONT PARKING
2	2024-10-23	SHOWING ALL PARKING & STACKING DIMENSIONS AND INCREASED DRIVE-THRU LANE WIDTHS PER CITY COMMENTS
3	2025-02-25	SMALL CHANGES BASED ON TRAFFIC IMPACT STUDY. MOVED A&W DIRECTIONAL SIGN @ WYECROFT RD ACCESS

NOTES

SEAL

The contractor will check and verify dimensions and report errors and omissions to the designer and the design professional whose seal is affixed to this drawing. Do not scale the drawings.

This drawing will not be used for construction purposes until issued for construction by the design professional whose seal is affixed to this drawing and whose signature is below.

ISSUED FOR CONSTRUCTION DATE

DIMENSIONS AND CONDITIONS TO BE VERIFIED ON THE PREMISES

K PAUL ARCHITECT INC.
TORONTO • VANCOUVER • ORLANDO
2660 Sherwood Heights Dr. Suite 200, Oakville, Ontario, L6J 7Y8
www.kpaularchitect.com
(905)337-9800 fax (905)337-1986

CLIENT

PETRO-CANADA
A Suncor business

DRAWING TITLE

ADD A&W TO SITE LAYOUT

PROJECT

845 BURLOAK DRIVE @ SOUTH SERVICE ROAD
OAKVILLE, ONTARIO

DRAWN	CHECKED
J. NORTON	
SCALE	DATE
1:200	2024-07-23
PROJECT NO.	DRAWING NO.
35207	SP1

Appendix C:
A&W Queue Study

MEMORANDUM

TO:

Gus Sarantopoulos
IGP Realty Advisors Inc.
19 Galsworthy Ave
Scarborough, Ontario
M1R 2N5

FROM:	PROJECT:	DATE:
Tim Arnott	8223-03	October 13, 2023
Justin Kwok	Gas Bar Operations Study	
Catherine Yokhana		

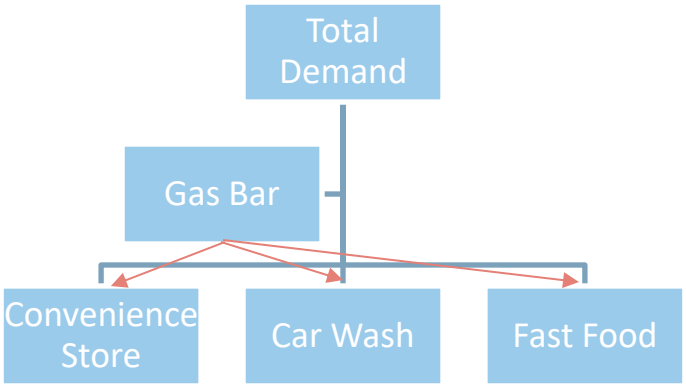
RE: SUNCOR-A&W DRIVE THRU QUEUING STUDY

1.0 INTRODUCTION

BA Group has been retained by Suncor Energy Products "Petro Canada" to investigate the demand and operational metrics at various existing gas bars throughout the Greater Toronto Area (GTA) to establish, based upon various characteristics and location context of the gas bar, the potential traffic demand and operational requirements of new gas bars.

Gas bar operations are typically coupled with secondary uses such as convenience stores, drive-through fast food, and car wash facilities that further augment demand at the location. Additional demand to these secondary facilities may potentially interact with the gas bar such that a vehicle uses both the primary gas bar and one or more secondary facilities in the same visit. A schematic of the flow of vehicle demand through the potential facilities is provided in **Figure 1**.

Figure 1: Schematic of Gas Bar Facility Demand Flows



2.0 PROXY SITE SELECTION

For the purposes of this study, Petro Canada had provided a list of 15 Petro Canada sites with an A&W drive through, car wash and convenience store facilities. These 15 sites are narrowed down to 5 sites based on their compatibility with queue review via cameras, a mix of municipalities within the GTA and sites with moderate or high adjacent street traffic activity to ensure busier gas bars are measured to obtain an upper bound of the operational metrics. These sites were further classified based on various locational characteristics including, the proximity to the nearest highway interchange and the number of pumps at the gas bar.

The magnitude of adjacent street traffic activity was determined based on a review of historical traffic volumes at nearby major intersections in the vicinity of the 15 Petro Canada sites. Typically, the closer the sites are to a 400-series highway interchange, the higher the adjacent street traffic which is associated with greater activity at the gas bar site.

Based on these considerations, five suburban sites with varying surrounding population along commuter routes across the GTA were chosen for this study as summarized in **Table 1**.

Table 1 Selected Site Summary

Site	Address	Municipality	# Gas Pump Stations	Zonal Population	Proximity to Interchange	Adjacent Traffic Flow
1	235 Steeles Ave E	Milton	10	15468	1150 m	Medium
2	3733 Highway 7	Woodbridge	16	15956	600 m	High
3	3700 Major Mackenzie Dr W	Vaughan	12	34833	700 m	Medium
4	8480 Highway 27	Vaughan	12	14108	850 m	Medium
5	3100 Ellesmere Ave	Scarborough	12	14238	1250 m	Low

Discussion with Petro Canada revealed that peak gas bar and drive-through activity typically occur on Fridays and Saturdays. As such, for each of these chosen sites, the 12-hour period from 7:00 to 19:00 was observed to establish typical demand, queuing and operation service times for the various facilities at these sites.

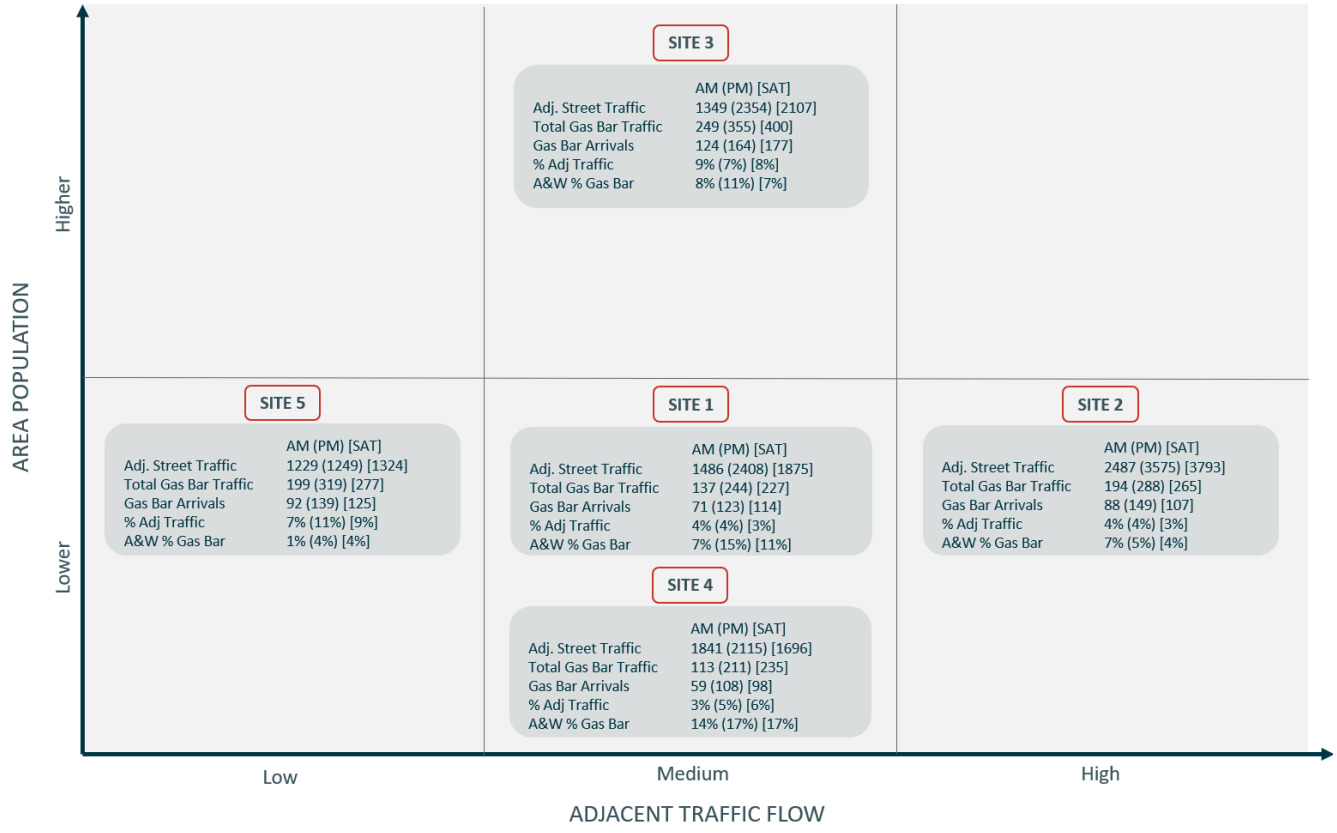
3.0 OVERALL SUMMARY

Section 3.0 examines the overall traffic within the gas bar sites with respect to the peak hours and the overall interaction with the services provided within site (i.e., A&W drive through). In addition, an overview of the dwell times and queues for each site will be examined. This high-level summary showcases how these results differ and coincide, demonstrating how the classification of the site may impacts results.

3.1 Total Gas Bar Demand & Arrivals

BA Group examined the total in and out volumes from each of the four gas bars study sites. The peak hour was identified, representing when the highest number of cars entered/exited the site during the weekday morning and afternoon and Saturday periods. Detailed summaries of traffic volumes related to the entire gas bar (two-way traffic and arrivals) and the A&W drive through arrivals at during peak hours for each site are provided in **Appendix A**. The resultant data for each site is plotted in **Figure 2** with respect to the area population and the level of adjacent traffic flow observed at each site.

Figure 2: A&W Gas Bar Traffic Demand Summary



Based on the resultant proportion of adjacent traffic captured by the observed gas bars relative to its surrounding area population, it was found that locations with higher surrounding area population capture a higher proportion of activity (i.e ~10%) from the adjacent street traffic flow as opposed to lower population areas which capture a lower proportion of traffic (i.e. ~5%) from the adjacent street traffic to use the gas bar across all time periods at the same adjacent street traffic level. Locations with lower adjacent street traffic level capture a higher proportion of activity (i.e. ~10%) as compared to other locations with similar area population levels but with higher adjacent street traffic levels (i.e. ~5%).

3.2 A&W Drive-Through Demand

The proportion of A&W drive through traffic was expressed relative to the total gas bar traffic. It was found that for the A&W, its proportion of traffic is generally independent of the area and adjacent traffic flow level that the gas bar site is located in. The A&W proportion of total gas bar traffic is consistent and is generally in the 5% range weekday mornings and Saturdays and around 10% weekday afternoons.

A portion of A&W drive through demand will overlap with patrons that used the gas pumps before or after those other ancillary uses. This interaction between the ancillary uses and the gas pumps was observed for the sites and it was found that on average, the interaction percentage for the A&W is 7%, 5% and 11% for the weekday morning, afternoon and Saturday peak hours, respectively.

These proportions and rates can be used in conjunction with a proposed gas bar location's area overall population and the adjacent street traffic level to forecast the anticipated total gas bar activity and A&W drive through demand for the proposed gas bar.

3.3 A&W Drive-Through Operations

Table 2 is an overview of the dwell times for the A&W drive through, examining two types of dwell times – order time and pay/pickup time. The order time measures how long users are waiting at the order station, while the pay/pickup time measures how long users are spending to pay and to receive their food at the drive through window.

The order time is generally within the control of drive-through customers in aggregate and is generally consistent with one another across all four sites averaging about 1 minute to 3.5 minutes to make an order. The range in dwell times to make an order is relatively small since drive through customers generally take similar time to decide what to order or would have decided beforehand from the menu. The average time ranges from 51 seconds to 74 seconds (i.e range of 23 seconds) whereas the maximum time ranges from 3 minutes to 4.5 minutes (i.e. range of 90 seconds).

The pay and pickup service time is determined by the staff operations inside the A&W depending on the staffing levels, allocation between in store versus drive-through that could fluctuate from day to day or hour to hour. On average, the pay and pickup service time is 1.5 minutes to 4.5 minutes on Friday and 7 minutes on Saturday. As expected, the pay and pickup service time takes longer and varies more from store to store. The average time ranges from 64 seconds to 110 seconds (i.e range of 46 seconds) whereas the maximum time ranges from 3 minutes to 10 minutes (i.e. range of 420 seconds).

Table 2 A&W Drive Through Service Times

	Friday					Saturday				
	Site 1	Site 2	Site 3	Site 4	Site 5	Site 1	Site 2	Site 3	Site 4	Site 5
Average Order Time	1:01	0:54	1:06	1:09	1:03	0:59	0:51	1:07	1:14	1:20
Max Order Time	3:36	3:54	4:24	3:33	3:26	3:29	2:49	4:03	3:57	3:40
Average Pay/Pickup Time	1:11	1:04	1:20	1:39	1:38	1:34	1:05	1:22	1:50	2:48
Max Pay/Pickup Time	4:15	3:11	4:25	6:25	5:30	7:37	8:18	4:53	9:23	10:06

Interaction between demand at the drive through and its service times result in queuing. **Table 3** is a summary the absolute the queues observed for each site, with average queues of 2 or less vehicles and **max queues of 5 or less vehicles**. The longer queues observed at Sites 3 and 4 are due to the generally having longer and more varied pay/pick-up times. With these typical service times, it is expected that the maximum A&W drive through queues will be 5 vehicles or less.

Table 3 A&W Drive Through Queue

	Friday					Saturday				
	Site 1	Site 2	Site 3	Site 4	Site 5	Site 1	Site 2	Site 3	Site 4	Site 5
Average Queue	0	0	1	1	1	0	1	2	2	1
Max Queue	2	2	2	3	1	3	2	4	5	1

3.4 Operations Classification Summary

The observed dwell and operation times for the A&W drive through and car wash across the five gas bar sites are classified in **Figure 3** based on the site location's area density and adjacent traffic flow.

Figure 3: A&W Drive Through and Car Wash Operations Summary

Queue storage for proposed gas bar ancillary facilities (i.e. A&W drive through) can be designed accommodate the max queues observed for the corresponding area population and adjacent traffic flow volume of the proposed location.

4.0 CONCLUSION

This study has examined the dwell times and queue lengths of services within gas bars that operate at higher volumes throughout the GTA. These five sites were typically in suburban locations along commuter routes and were in proximity to a major 400-series interchange. Additionally, the sites examined were located at intersections with high car volumes to assess the adjacent street volume capture rate based on the noted locational characteristics.

Table 4 provides a summary of the key queuing results from the study. It was found that an A&W at a typical gas bar in a range of suburban conditions will have a maximum 5-vehicle queue waiting in front of the order station. As such, for a typical gas bar in such a location, the queue storage design for a typical suburban A&W drive-through should have accommodation for at least 5 vehicles.

Table 4 Queue Summary

	A&W Drive Through				
	Site 1 235 Steeles Ave E	Site 2 3733 Highway 7	Site 3 3700 Major Mackenzie Dr	Site 4 8480 Highway 27	Site 5 3100 Ellesmere Ave
Max Queue Observed	3	2	4	5	1
Maximum	5				

Should a proposed gas bar site not have sufficient footprint to adequately provide the above queuing storages for an A&W drive-through, a simulation can be formulated to assess the probability of various queuing level with site demand levels customized for the location context of the proposed site. Such a simulation would rely upon service time distributions derived from the set of observed dwell times at the various gas bar sites for ordering and payment/pick-up processes.

The dwell times for each service are generally not impacted by the type of site and are consistent regardless of the site's locational characteristics. The A&W drive-through tends to have slightly higher dwell times due to the nature of a drive-through where service is provided by one or more people at multiple steps and thus have a greater variance in operation (depending on the staffing level at the various A&W locations).

Sub-Appendix A

Total Gas Bar and A&W Drive Through Demand Summary

Table 5 Friday AM Peak Hour

Peak Hour	Site 1	Site 2	Site 3	Site 4	Site 5
	9:00 – 10:00 AM	7:15 – 8:15 AM	9:30 – 10:30 AM	8:30 – 9:30 AM	8:30 – 9:30 AM
TOTAL SITE					
Adjacent Street Traffic	1486	2487	1349	1841	1229
Gas Bar Total Traffic	137	194	249	113	199
Gas Bar Total Arrivals	71	88	124	59	92
Arrival % Adj. Traffic	4%	4%	9%	3%	7%
A&W					
A&W Arrivals	5	6	10	8	2
Max A&W Arrivals[1]	8	6	10	13	6
% of Gas Bar Arrivals	7%	7%	8%	14%	1%
Interaction with Gas	7%				0%

Notes:
1. Max A&W Arrivals based on the A&W generator peak hour, rather than gas bar peak hour.

Table 6 Friday PM Peak Hour

Peak Hour	Site 1	Site 2	Site 3	Site 4	Site 5
	5:15 -6:15 PM	5:30 – 6:30 PM	4:45 – 5:45 PM	4:45 – 5:45 PM	4:45 – 5:45 PM
TOTAL SITE					
Adjacent Street Traffic	2408	3575	2345	2115	1249
Gas Bar Total Traffic	244	288	355	211	319
Gas Bar Total Arrivals	123	149	164	108	139
Arrival % Adj. Traffic	4%	4%	7%	5%	11%
A&W					
A&W Arrivals	19	8	18	18	6
Max A&W Arrivals[1]	26	14	23	23	15
% of Gas Bar Arrivals	15%	5%	11%	17%	4%
Interaction with Gas	5%				1%

Notes:
1. Max A&W Arrivals based on the A&W generator peak hour, rather than gas bar peak hour.

Table 7 Saturday Midday Peak Hour

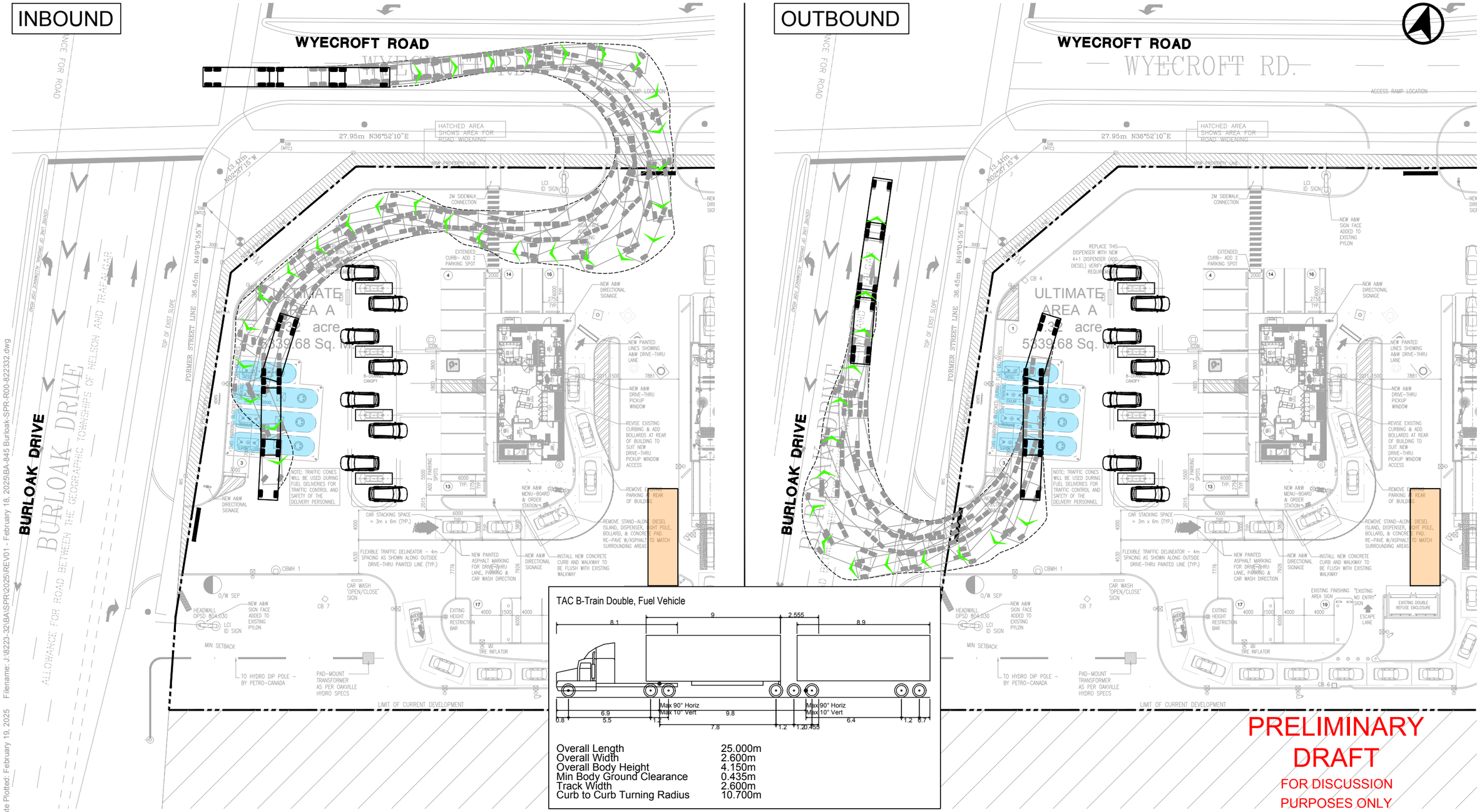
Peak Hour	Site 1	Site 2	Site 3	Site 4	Site 5
	1:15-2:15 PM	2:45 – 3:45 PM	12:45 – 1:45 PM	1:15 – 2:15 PM	2:45 – 3:45 PM
TOTAL SITE					
Adjacent Street Traffic	1875	3793	2107	1696	1324
Gas Bar Total Traffic	227	265	400	235	277
Gas Bar Total Arrivals	114	107	177	98	125
Arrival % Adj. Traffic	3%	3%	8%	6%	9%
A&W					
A&W Arrivals	13	4	13	17	5
Max A&W Arrivals[1]	14	11	34	23	11
% of Gas Bar Arrivals	11%	4%	7%	17%	4%
Interaction with Gas	11%				1%

Notes:
1. Max A&W Arrivals based on the A&W generator peak hour, rather than gas bar peak hour.

Appendix D:
Vehicle Manoeuvring Diagrams

INBOUND

OUTBOUND



TAC B-Train Double, Fuel Vehicle

Overall Length	25.000m
Overall Width	2.600m
Overall Body Height	4.150m
Min Body Ground Clearance	0.435m
Track Width	2.600m
Curb to Curb Turning Radius	10.700m

PRELIMINARY DRAFT

FOR DISCUSSION PURPOSES ONLY

Date Plotted: February 19, 2025 Filename: J:\8223-32\BA\SPR\2025\REV01 - February 18, 2026\BA-845 Burloak-SPR-R00-822332.dwg

BA Group

845 BURLOAK DRIVE

Vehicle Manoeuvring Diagram

B-Train Fuel Truck - Inbound / Outbound

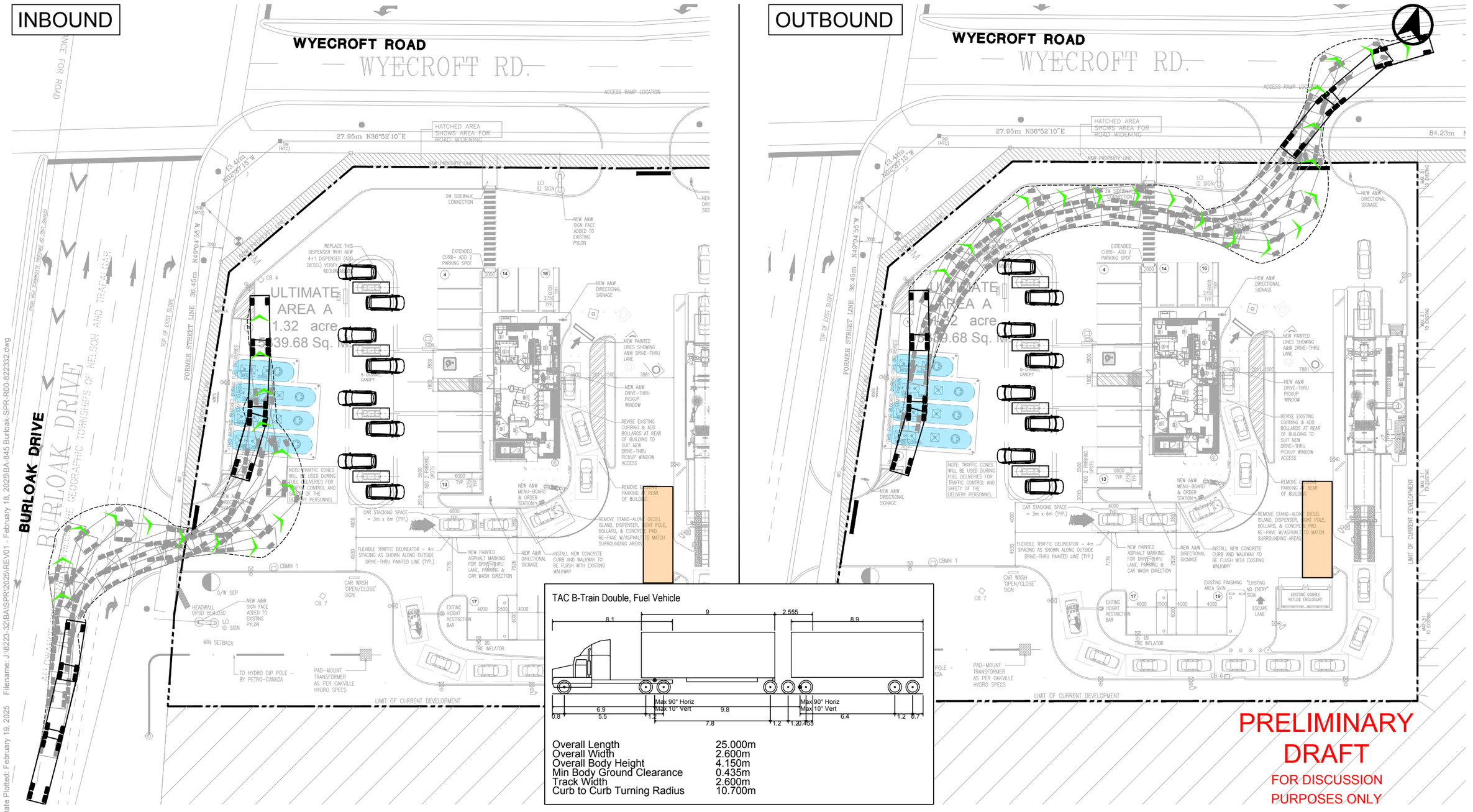
Project:	845 BURLOAK DR
Project No.	8223-32
Date:	February 19, 2025
Revised:	--

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-1

INBOUND

OUTBOUND



TAC B-Train Double, Fuel Vehicle

Overall Length	25.000m
Overall Width	2.600m
Overall Body Height	4.150m
Min Body Ground Clearance	0.435m
Track Width	2.600m
Curb to Curb Turning Radius	10.700m

PRELIMINARY DRAFT
FOR DISCUSSION PURPOSES ONLY

Date Plotted: February 19, 2025 Filename: J:\8223-32\BA\SPR\2025\REV01 - February 18, 2025\BA-845 Burloak-SPR-R00-822332.dwg

BA Group

845 BURLOAK DRIVE

Vehicle Manoeuvring Diagram

B-Train Fuel Truck - Inbound / Outbound

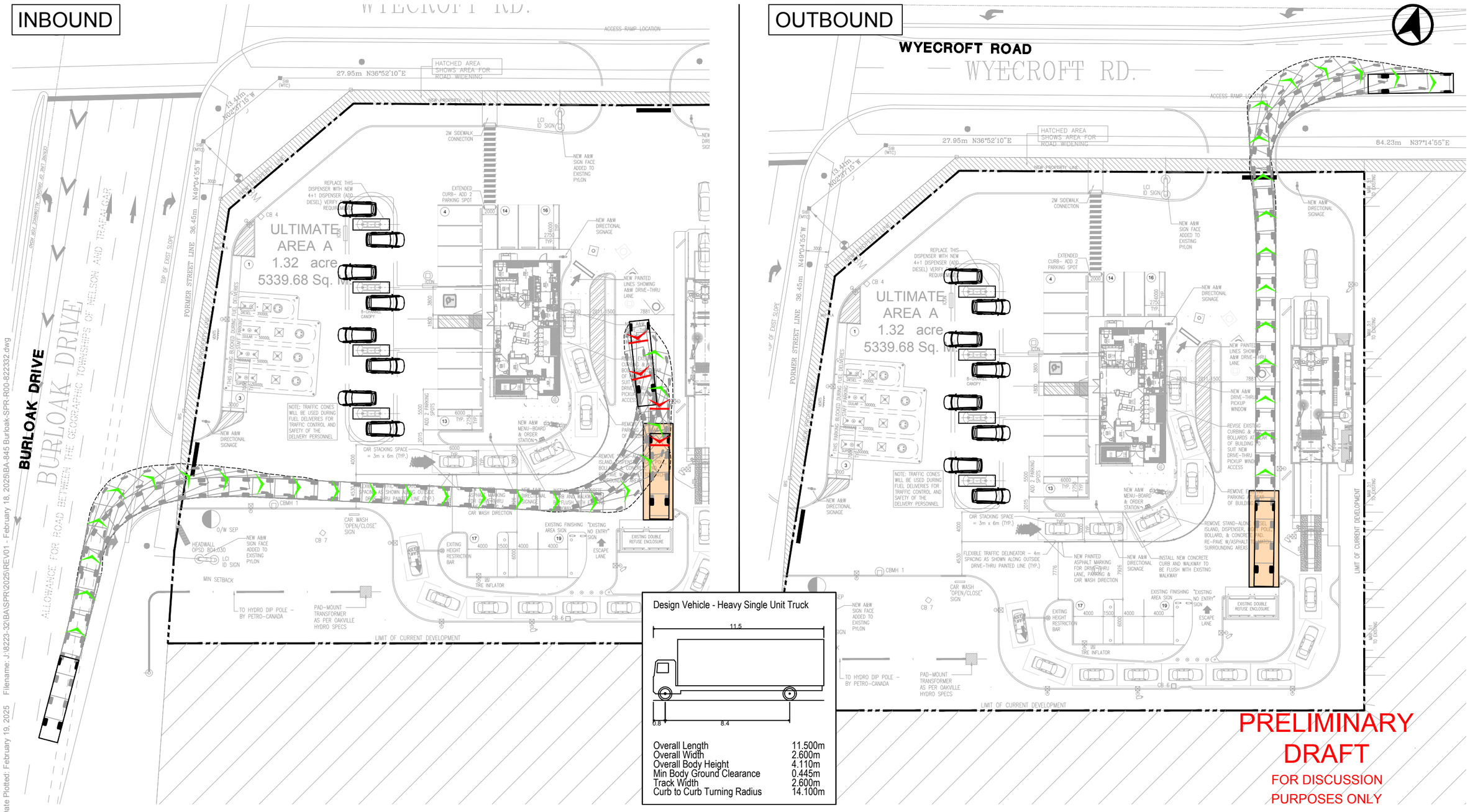
Project:	845 BURLOAK DR
Project No.	8223-32
Date:	February 19, 2025
Revised:	--

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-2

INBOUND

OUTBOUND



Design Vehicle - Heavy Single Unit Truck

Overall Length	11.500m
Overall Width	2.600m
Overall Body Height	4.110m
Min Body Ground Clearance	0.445m
Track Width	2.600m
Curb to Curb Turning Radius	14.100m

PRELIMINARY DRAFT
FOR DISCUSSION PURPOSES ONLY

Date Plotted: February 19, 2025 Filename: J:\8223-32\BA\SPR2025\REV01 - February 18, 2025\BA-845 Burloak-SPR-R00-822332.dwg

BA Group

845 BURLOAK DRIVE

Vehicle Manoeuvring Diagram

Heavy Single Unit Delivery Truck - Inbound / Outbound

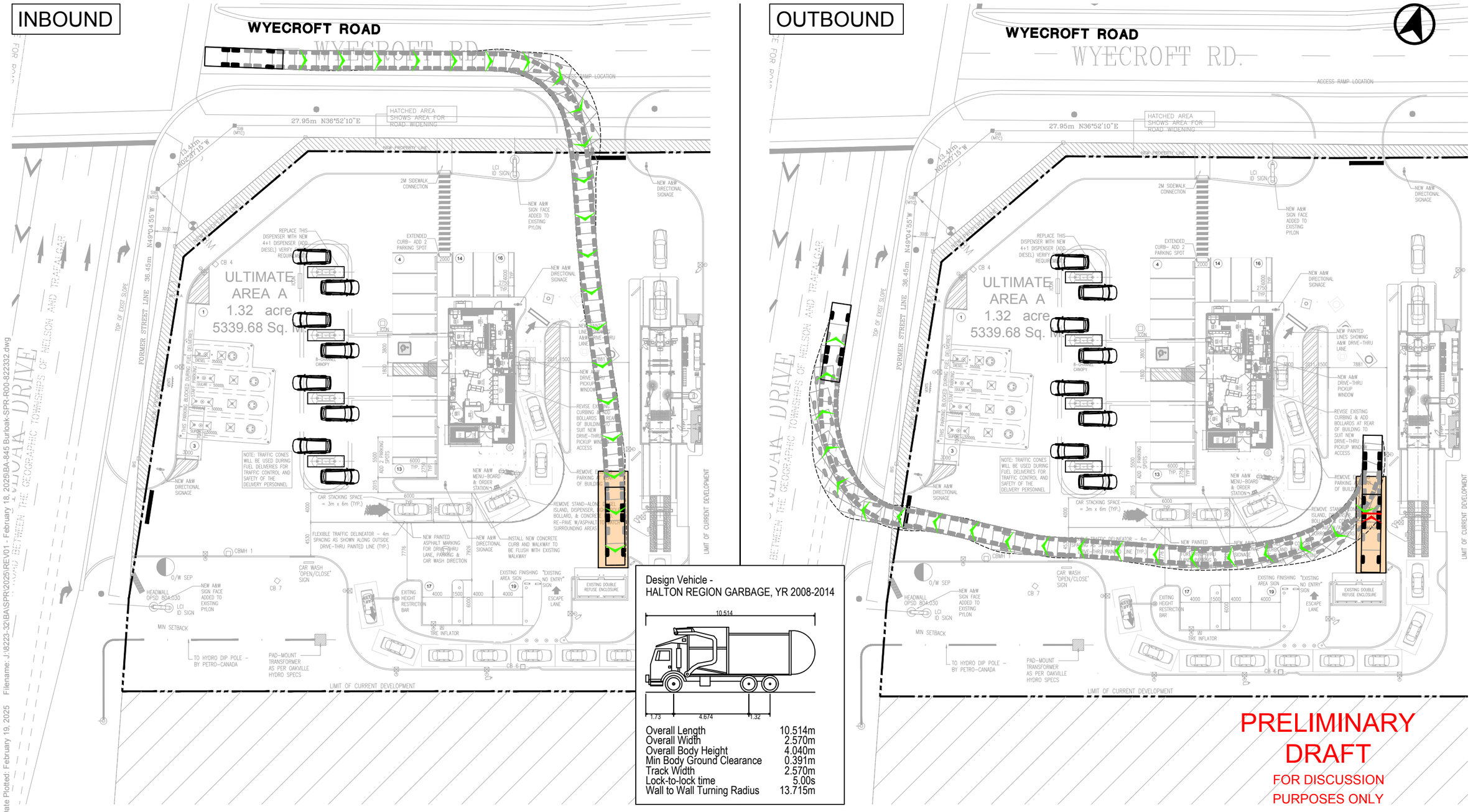
Project:	845 BURLOAK DR
Project No.	8223-32
Date:	February 19, 2025
Revised:	--

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-3

INBOUND

OUTBOUND



Design Vehicle -
HALTON REGION GARBAGE, YR 2008-2014

Overall Length	10.514m
Overall Width	2.570m
Overall Body Height	4.040m
Min Body Ground Clearance	0.391m
Track Width	2.570m
Lock-to-lock time	5.00s
Wall to Wall Turning Radius	13.715m

PRELIMINARY DRAFT
FOR DISCUSSION PURPOSES ONLY

Date Plotted: February 19, 2025 Filename: J:\8223-32\BA\SPR\2025\REV01 - February 18, 2025\BA-845 Burloak-SPR-R00-822332.dwg

BA Group

845 BURLOAK DRIVE

Vehicle Manoeuvring Diagram

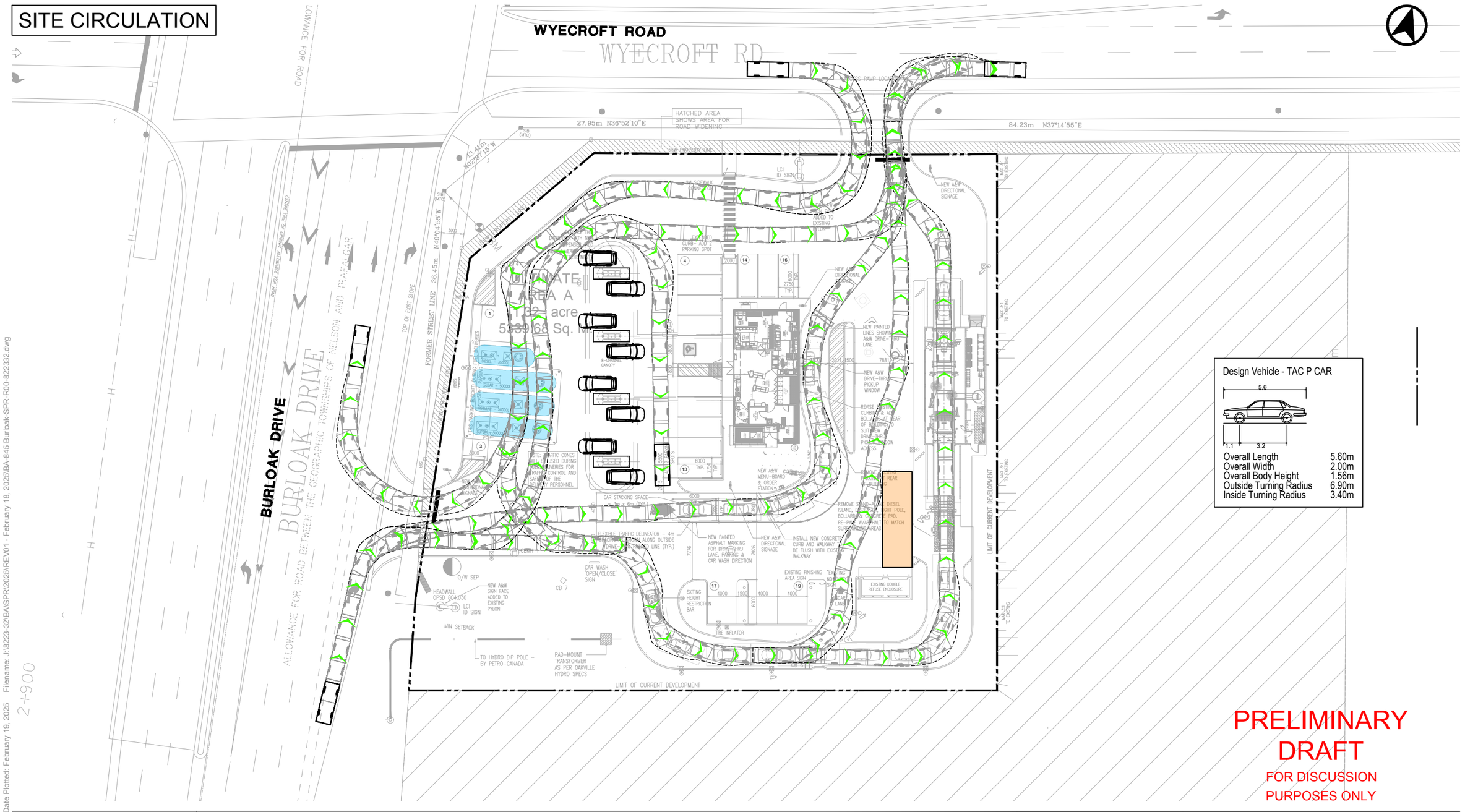
Refuse Collection Vehicle - Inbound / Outbound

Project:	845 BURLOAK DR
Project No.	8223-32
Date:	February 19, 2025
Revised:	--

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-4

SITE CIRCULATION



Design Vehicle - TAC P CAR

Overall Length	5.60m
Overall Width	2.00m
Overall Body Height	1.56m
Outside Turning Radius	6.90m
Inside Turning Radius	3.40m

PRELIMINARY DRAFT

FOR DISCUSSION PURPOSES ONLY

Date Plotted: February 19, 2025 Filename: J:\8223-32\BA\SPR\2025\REV01 - February 18, 2025\BA-845 Burloak-SPR-R00-822332.dwg

BA Group

845 BURLOAK DRIVE

Vehicle Manoeuvring Diagram

TAC P - Passenger Vehicle Circulation of the Site

Project:	845 BURLOAK DR
Project No.	8223-32
Date:	February 19, 2025
Revised:	--

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-5

Appendix E:
Zoning By-law Excerpts

Parking, Loading, & Stacking Lane Provisions

Table 5.2.1: Ratios of Minimum Number of Parking Spaces	
Use	**Minimum Number of Parking Spaces**
Accessory Residential Uses	
Accessory dwelling unit (2023-024)	1.0 additional *parking space*
Bed and breakfast establishment	1.0 additional *parking space* per *lodging unit*
Day care	<See "Institutional and Community *Uses*" row>
Home occupation	No minimum requirement
Lodging house	1.0 additional *parking space* per *lodging unit*
Private home day care	No minimum requirement
Short-term accommodation	1.0 additional *parking space* (5)
Retail Uses	
Retail propane transfer facility	1.0 per 40.0 m^2 *net floor area*
Retail store or any other "store" permitted by this By-law	1.0 per 18.0 m^2 *net floor area*
Service Commercial Uses	
Adult entertainment establishment	1.0 per 18.0 m^2 *net floor area*
Commercial school	1.0 per 22.0 m^2 *net floor area*
Dry cleaning/laundry	1.0 per 22.0 m^2 *net floor area*
Financial institution	1.0 per 22.0 m^2 *net floor area*
Food production	1.0 per 40.0 m^2 *net floor area*
Funeral home	1.0 per 14.0 m^2 *net floor area*
Pet care establishment	1.0 per 22.0 m^2 *net floor area*
Place of entertainment	1.0 per 22.0 m^2 *net floor area*
Rental establishment	1.0 per 18.0 m^2 *net floor area*
Restaurant	1.0 per 10.0 m^2 *net floor area*
Service commercial establishment	1.0 per 22.0 m^2 *net floor area*
Sports facility	a) 1.0 per 18.0 m^2 *net floor area*; plus, b) 4 *parking spaces* per outdoor playing court; plus, c) 12 *parking spaces* per outdoor playing field
Taxi dispatch	1.0 per 22.0 m^2 *net floor area*
Veterinary clinic	1.0 per 22.0 m^2 *net floor area*
Office Uses	
Business office	1.0 per 35.0 m^2 *net floor area* (4)
Medical office	a) For the first 60% of the *net floor area* on the *lot* occupied by *medical offices*, 1.0 per 35.0 m^2 *net floor area* b) Where *medical offices* occupy greater than 60% of the *net floor area* of the *building*, 1.0 per 18.0 m^2 *net floor area* for the entire *building*

Parking, Loading, & Stacking Lane Provisions

Table 5.2.1: Ratios of Minimum Number of Parking Spaces	
Use	**Minimum Number of Parking Spaces**
• *School, private* • *School, public*	a) For elementary schools, 1.5 per classroom, not including any portables b) For secondary schools, 4.0 per classroom, not including any portables
Open Space Uses	
Agriculture	No minimum requirement
Boarding kennel	1.0 per 35.0 m^2 *net floor area*, to a maximum minimum requirement of 6 *parking spaces*
Cemetery	No minimum requirement
Conservation use	No minimum requirement
Golf course	a) 6.0 per hole; plus, b) 1.0 per 22.0 m^2 *net floor area* for any *accessory uses*
Outdoor miniature golf course	1.0 per hole
• *Park, private* • *Park, public*	No minimum requirement
Hospitality Uses	
Hotel	a) 1.0 per *lodging unit*; plus, b) 1.0 per 30.0 m^2 *net floor area* outside of a *lodging unit*
Public hall	1.0 per 18.0 m^2 *net floor area*
Motor Vehicle Uses	
Motor vehicle body shop	1.0 per 100.0 m^2 *net floor area*
Motor vehicle dealership	1.0 per 100.0 m^2 *net floor area*
Motor vehicle rental facility	1.0 per 100.0 m^2 *net floor area*
Motor vehicle repair facility	1.0 per 100.0 m^2 *net floor area*
Motor vehicle service station	1.0 per 100.0 m^2 *net floor area*
Motor vehicle storage compound	1.0 per 100.0 m^2 *net floor area*
Motor vehicle washing facility	1.0 per 100.0 m^2 *net floor area*

A "classroom" includes teaching rooms such as a library or gymnasium.

Additional Regulations for Minimum Parking Ratios Table 5.2.1 *(2017-025)*

1. Of the total number of *parking spaces* required, 0.25 of the *parking spaces* required per *dwelling* shall be designated as visitors *parking spaces*.
2.
   a) The location of visitors *parking spaces* shall be in accordance with Section 5.1.9. *(2017-025)*
   b) The visitors *parking spaces* for a *multiple* or *townhouse dwelling* shall only be required in a *condominium* and shall be located on a parcel of land tied to a *common element condominium*. *(2017-025)*

Inventory motor vehicles are not to be parked in required parking spaces, per Section 5.1.2 of this By-law.

Parking, Loading, & Stacking Lane Provisions

5.2.3 Motor Vehicle Parking Space Dimensions *(2017-025)*

a) The minimum dimensions of a *parking space* not located in a *private garage* shall be 2.7 metres in width and 5.7 metres in length.

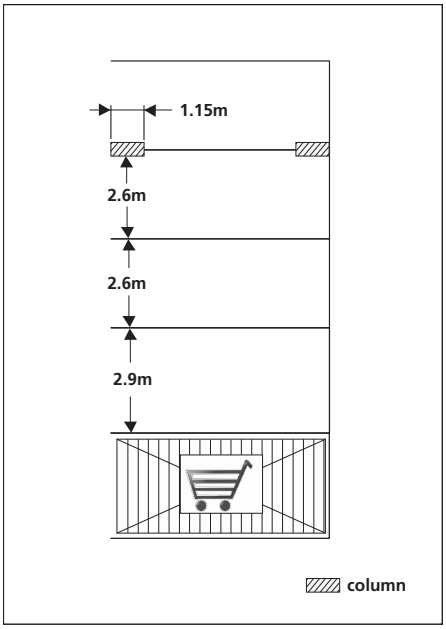
b) The minimum dimensions of a *parking space* located in a *private garage* shall be 5.7 metres in length and:

i) Where one *parking space* is provided, 3.0 m in width;
ii) Where two *parking spaces* are provided side-by-side, 2.8 m in width per *parking space*, or 5.6 m in total combined width;
iii) Where *tandem parking spaces* are provided, 3.0 m in width per *parking space*; and,
iv) Where *stacked parking spaces* are provided, 3.0 m in width for either the *parking space* on or below the vehicle elevating device

c) The minimum dimensions of a *parking space* provided with the length parallel to the *aisle* or *driveway* shall be 2.7 metres in width and 7.0 metres in length.

d) Where a wall, column, or other obstruction is located abutting or within any *parking space*, the minimum width of the *parking space* shall be increased by 0.3 metres for each side that is obstructed. Obstructions within 1.15 metres of either stall end do not require an increase in *parking space* width, provided the obstruction projects no more than 0.15 metres into the *parking space*. *(2015-018)*

e) Where two *parking spaces* are provided in tandem, the minimum cumulative dimensions of the *parking spaces* shall be 2.7 metres in width and 11.7 metres in length.



Where a wall, column, or other obstruction is next to a parking space, this By-law may require the parking space to be wider.

5.3 Barrier-free Parking Spaces

5.3.1 Ratios for Minimum Number of Spaces

a) *Barrier-free parking spaces* shall be required for all non-residential *uses*.

b) *Barrier-free parking spaces* shall additionally be required for visitor *parking spaces* for the following residential *uses*. The total number of *parking spaces* in the left column of Table 5.3.1 shall be calculated using only the total number of visitor *parking spaces* on the *lot*: *(2015-018)*

i) *Apartment dwelling*;
ii) *Dormitory*; and,
iii) *Stacked townhouse dwelling*.

c) The minimum number of *barrier-free parking spaces* required shall be calculated in accordance with the ratios set out in Table 5.3.1, below.

Table 5.3.1: Minimum Number of Barrier-free Parking Spaces

Total Number of Parking Spaces in all Parking Areas on the Lot	Minimum Number of Barrier-free Parking Spaces
3 to 25 *(2015-018)*	1
26 to 100 *(2015-018)*	4% of the total number of *parking spaces* in the *parking area*

TERRAPEX

Suncor Energy Products Partnership

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

845 Burloak Drive
Oakville, Ontario

Outlet Number 35207
FINAL REPORT

March 21, 2024

PROJECT # CT3959.00

Terrapex Environmental Ltd.
20 Gurdwara Road, Unit 1, Ottawa, Ontario, K2E 8B3
Telephone: (613) 745 - 6471
www.terrapex.com

DISTRIBUTION: Suncor Energy Products Partnership **Digital Copy**

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

Terrapex was retained by Suncor Energy Products Partnership (Client) to conduct a Phase One Environmental Site Assessment (ESA) of the property located at 845 Burloak Drive, Oakville (the Phase One Property, hereinafter also referred to as the Site). It is understood that the Phase One ESA documented herein was undertaken as part of the Town of Oakville development application process that requires environmental investigations to be completed in accordance with Ontario Regulation (O. Reg.) 153/04 under the Environmental Protection Act, Records of Site Condition - Part XV.1 of the Act. It is noted that a Record of Site Condition (RSC) will not be filed for the Site as a change to a more sensitive land use is not required.

The objective of the investigation was to identify actual and potential sources of contamination associated with the site arising from current and/or historical activities on the site and on properties within the Phase One study area in order to satisfy the following Phase One ESA general objectives listed in O. Reg. 153/04:

- to develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One Property;
- to determine the need for a Phase Two ESA; and,
- to provide a basis for carrying out any Phase Two ESA required.

The Site has an irregular shape with the municipal address of 845 Burloak Dr located in Oakville, ON. The Site is located on the southeastern corner of the Burloak Dive and Wyecroft Road intersection and measures 5460.5 m² in area.

The Site has been cleared but vacant since as early as the 1954 (potentially used for agricultural purposes), and was first developed for use as a retail fuel outlet in 2004. The Site is primarily covered with asphalt, with concrete aprons located on the pump island and tank nest areas. There are grass areas with planted trees around the perimeter of the Site.

There are currently three structures present on the Site. The retail fuel outlet with kiosk is present on the central portion of the Site, a car wash is present on the northeastern portion of the Site, and a storage enclosure (roofed and cladded) is located on the eastern corner of the Site.

Adjacent properties include:

- vacant land to the east and south of the Site;
- a movie theater and restaurants to the north and northwest of the Site (beyond Wyecroft Road);
- a retail fuel outlet and a car wash is located to the west of the Site beyond the intersection of Burloak Drive and Wyecroft Road; and;

- commercial properties are located to the southwest of the Site beyond Burloak Drive.

The Site location is shown in Figure 1, while the current layout of the Site is shown in Figure 2. The surrounding land use is summarized in Figure 3.

The current registered owner of the Site is Suncor, which has owned the property since 2004. Based on the above, it was determined that the first developed land use at the Site was in 1954 at least when the property was used for/developed for agricultural purposes.

Following the completion of the preliminary records review, Terrapex determined the following:

- Due to the former use of the Site as a gasoline outlet, the Site is determined to be an enhanced investigation property.
- The Phase One Study Area consists of the Site and properties located wholly or partly within 250 meters (m) from the nearest point on the boundary of the Site. There was no to include any properties beyond this distance.
- The Site has been developed for residential purposes since at least 1954.

Based on the review, evaluation, and interpretation of the information obtained from the records review, interviews, and Site reconnaissance, three potentially contaminating activities (PCAs), as listed in Table 2 of Schedule D of O. Reg. 153/04, or as determined by the QP, were identified within the Site. A further Ten PCAs were identified within the Phase One Study Area, and none resulted in areas of potential environmental concern (APECs) at the Site except for one PCA located approximately 55 m to the west of the Site and is anticipated to affect the Site. The APECs identified for the Site together with the associated contaminants of potential concern (COPCs) are summarized in the following table:

APEC[1]	APEC Location	PCA[2]	Location of PCA	COPCs	Media Potentially Impacted
APEC 1 (PCA 1)	Pump island, tank nest, oil water separator near the car wash	28 - Gasoline and Associated Products Storage in Fixed Tanks	On Site	BTEX, PHCs (F1 - F4), Metals and Inorganics. PAHs	Soil Groundwater
APEC 2 (PCA 2)	Eastern portion of the Site (around the transformer)	55- Transformer Manufacture, Processing and Use.	On-Site	PCBs	Soil

APEC[1]	APEC Location	PCA[2]	Location of PCA	COPCs	Media Potentially Impacted
APEC 3 (PCA 3)	Entire Site	30 - Importation of Fill Material of Unknown Quality	On-Site	BTEX, PHCs (F1 - F4), Metals and Inorganics. PAHs	Soil Groundwater
APEC 4 (PCA 4)	Southwestern portion of the Site	28 - Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	BTEX, PHCs (F1 - F4), Metals and Inorganics. PAHs	Groundwater

[1] Areas of potential environmental concern means the area on, in or under a Phase One Property where one or more contaminants are potentially present, as determined through the Phase One environmental site assessment, including through,

(a) identification of past or present uses on, in or under the Phase One Property, and

(b) identification of potentially contaminating activity.

[2] Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One study area.

2.0 INTRODUCTION

Terrapex Environmental Ltd. (Terrapex) was retained by Suncor Energy Products Partnership (Client) to conduct a Phase One Environmental Site Assessment (ESA) of the property located at 845 Burloak Drive, Oakville, Ontario (the Phase One property, hereinafter referred to as the Site). It is understood that the study documented herein is being undertaken for due diligence purposes and is being conducted in general accordance with Ontario Regulation (O. Reg.) 153/04 under the Environmental Protection Act, *Records of Site Condition - Part XV.1 of the Act*.

2.1 OBJECTIVE

The objective of the investigation was to identify actual and potential sources of contamination associated with the Site arising from current and/or historical activities on the Site and on properties within the Phase One Study Area (refer to Section 4.1.1. below), in order to satisfy the Phase One ESA general objectives listed in the Ontario *Records of Site Condition - Part XV.1 of the Act regulation* (O. Reg. 153/04):

- to develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One Property;
- to determine the need for a Phase Two ESA;
- to provide a basis for carrying out any Phase Two ESA required; and,
- to provide adequate preliminary information about environmental conditions in the land or water on, in or under the Phase One Property for the conduct of a Risk Assessment following completion of a Phase Two ESA.

2.2 PHASE ONE PROPERTY INFORMATION

The Site has an irregular shape with the municipal address of 845 Burloak Dr located in Oakville, ON. The Site is located on the southeastern corner of the Burloak Dive and Wyecroft Road intersection and measures 5460.5 m² in area.

The Site has been cleared but vacant since as early as the 1954 (potentially used for agricultural purposes), and was first developed for use as a retail fuel outlet in 2004. The Site is primarily covered with asphalt, with concrete aprons located on the pump island and tank nest areas. There are grass areas with planted trees around the perimeter of the Site.

There are currently three structures present on the Site. The retail fuel outlet with kiosk is present on the central portion of the Site, a car wash is present on the northeastern portion of the Site, and a storage enclosure (roofed and cladded) is located on the eastern corner of the Site.

Adjacent properties include:

- Vacant land to the east and north of the Site;
- A movie theater and restaurants to the north and northwest of the Site (beyond Wyecroft Road);
- A retail fuel outlet and a car wash are located to the west of the Site beyond the intersection of Burloak Drive and Wyecroft Road; and;
- Commercial properties are located to the southwest of the Site beyond Burloak Drive.

The Site location is shown in Figure 1, while the current layout of the Site is shown in Figure 2. The surrounding land use is summarized in Figure 3.

Information regarding the location and identification of the Phase One Property and the party authorizing this study is provided in the table below. Refer to Figure 1 for the location of the Site, and to Figure 2 for the general layout of the Site at the time of the Site reconnaissance.

SUMMARY OF PHASE ONE PROPERTY INFORMATION

Address:	845 Burloak Drive, Oakville, Ontario, L6L 6V9
Property Identification Number:	24858-0250 (LT)
Legal Description:	PART LOT 35, CON 3 TRAF SDS, PART 1 20R19151 TOGETHER WITH AN EASEMENT OVER PART 1 20R17292 AS IN HR601287 SUBJECT TO AN EASEMENT IN GROSS OVER PART 1 HR1782705 AS IN HR1782705 TOWN OF OAKVILLE
UTM Coordinates (centre of site, WGS 84):	17T East: 601123.65 m North: 4805139.61 m
Name and Address of Owner:	Suncor Energy Products Partnership 3275 Rebecca Street Oakville, Ontario L6L 6N5
Name and Address of Authorizing Party:	Donna Wojtanowski M.A, P.Geo, Asset Management Advisor 3275 Rebecca Street Oakville, Ontario L6L 6N5
Site Area:	5460.5 m²
Structures:	Retail Fuel Outlet, Convenience Store , Car Wash, Garbage Enclosure (roofed and cladded)
Occupants (current):	Petro-Canada
Other facilities of note:	None

2.3 PLAN OF SURVEY

Suncor Energy Products Partnership provided a Surveyor's Real Property Report, entitled *Part of Lot 35, Concession 3, South of Dundas Street Registered Town of Oakville Regional Municipality of Halton*, prepared by Sexton McKay Limited (unstamped), dated April, 2010. The plan shows a "car wash building" situated in the northern portion of the Site, a convenience store and pump island in the central portion of the Site and a garbage enclosure in the northeastern portion of the Site. A copy of the survey plan is included in Appendix I.

2.4 ENHANCED INVESTIGATION PROPERTY

An enhanced investigation property is defined in O. Reg. 153/04 as a property that is being used or has been used, in whole or in part, for industrial use or for commercial use as a garage, a bulk liquid dispensing facility (including a gasoline outlet), or for the operation of dry cleaning equipment. The Site is an enhanced investigation property.

3.0 SCOPE OF INVESTIGATION

3.1 GENERAL

The Phase One ESA was conducted in accordance with the current requirements of O. Reg. 153/04 and as outlined in the Terrapex proposal to Suncor Energy Products Partnership dated November, 06, 2023. The Phase One ESA also meets or exceeds the requirements of a Phase I ESA as prescribed by the Canadian Standards Association Standard Z768-01 (R2012). The five main components of the Phase One ESA scope of work are described below.

Records Review: A review was conducted of available historic and current environmental information pertaining to the Site and the Phase One study area in accordance with Schedule D (Phase One Environmental Site Assessments) of O. Reg. 153/04.

Interviews: An interview was conducted with a representative of the current owner of the Site. Representatives of the previous owners were not available.

Site Reconnaissance: A reconnaissance of the Site and accessible properties within the Phase One study area was conducted for evidence of potential environmental concerns.

Evaluation: The information obtained from the records review, interviews, and Site reconnaissance was reviewed, evaluated and interpreted by the Qualified Person (QP) for this project (see Section 3.2 below) in consideration of the Phase One ESA general objectives and any uncertainty associated with the data sources.

Reporting: In accordance with the requirements of Schedule D of O. Reg. 153/04, this report documents the findings, conclusions, and recommendations of the Phase One ESA and includes:

- a table of the current and past uses of the Phase One property;
- a table of identified potentially contaminating activities (PCAs) and a table of associated areas of potential environmental concern (APECs);
- a Phase One conceptual Site model (CSM); and,
- conclusions and recommendations made based on the evaluation and interpretation of information obtained for the Phase One ESA.

3.2 QUALIFIED PERSON

The Phase One ESA was supervised by Craig Beaton, PEng., QP_{ESA} of Terrapex, located at 20 Gurdwara Road, Unit 1, Ottawa, Ottawa, Ontario. Craig Beaton, PEng., QP_{ESA} is a Senior Project Manager and meets the qualifications as a Qualified Person (QP) with the Ministry of the

Environment, Conservation and Parks (MECP, formerly known as the Ministry of Environment and Climate Change, MOECC, and Ministry of the Environment, MOE) for the purpose of creating and submitting RSCs for filing on the *Brownfields Environmental Site Registry* (ESR).

3.3 LIMITATIONS

It should be noted that although Terrapex has attempted to verify information wherever possible, except where explicitly noted, we have relied upon the accuracy of information collected during the records review and interview components.

The general limitations of the study are provided in Section 8.3. Specific limitations of this Phase One ESA are as follows:

- The roof of the building was not accessible for safety reasons;
- No personnel with knowledge of the Site prior to 2013 were available for interviews;
- The car wash was not accessible due to safety protocols.

In the opinion of the QP, none of the above limitations are considered to have compromised the objectives of the Phase One ESA.

4.0 RECORDS REVIEW

4.1 GENERAL

Terrapex obtained and reviewed records relating to the Site and surrounding properties within the Phase One Study Area, in accordance with Schedule D (Phase One Environmental Site Assessments) of O. Reg. 153/04. The records and sources of information reviewed are summarized below, and a list of all documents and data cited in this report is provided in Section 9.0.

4.1.1 Phase One Study Area Determination

To determine the Phase One Study Area, Terrapex conducted a preliminary records review to identify any conditions that might warrant an expansion of the Phase One Study Area beyond the minimum required by O. Reg. 153/04. This review included searches / reviews of the following information:

- Aerial photographs and satellite images;
- Provincial waste disposal Site inventory documents; and,
- Reports documenting previously completed environmental investigations of the Site.

The preliminary review did not identify any potential concerns warranting an expansion of the Phase One Study Area. Accordingly, the Phase One Study Area was established to encompass all of the properties that were located in whole or in part, within 250 m of the boundaries of the subject site.

The boundary of the Phase One Study Area is depicted in Figure 3. Note that all distances are calculated from the nearest property boundary of the Site to the nearest boundary of the feature/site in question and are approximate.

4.1.2 First Developed Use Determination

Information obtained during the records review portion of the work program was used to determine the date of the first developed use of the Site, as defined in O. Reg. 153/04, is summarized in the table below.

First Developed Use

Year	Site Features	Potentially Contaminating Activity[1]	Reference / Source
2004	Operating retail gas station	28 - Gasoline and Associated Products Storage in Fixed Tanks 30 - Importation of Fill Material of Unknown Quality 55 - Transformer Manufacturing, Processing and Use	Aerial photos, ERIS Database report, and previous environmental reports.

1. [1]*As set out in Table 2 in Schedule D of O. Reg. 153/04.*

Based on the above, it was determined that the first developed land use at the Site was in 2004, when the property was developed for use as a retail gas station. Prior to that, it was vacant (potentially used for agricultural purposes) since at least 1954.

4.1.3 Fire Insurance Plans

Fire Insurance Plans were not ordered. However, based on the Risk Management Services (RMS) search for the Historical Environmental Information Reporting System (HEIRS) provided in the *Phase I Environmental Site Assessment (ESA) - 845 Burloak Drive, Oakville, Ontario,* prepared by Terrapex, dated February 2010, no Fire Insurance Plans or Fire Insurance Products were found. The RMS findings are provided in Appendix VI.

4.1.4 Chain of Title

A chain of Title was not ordered as part of this Phase One ESA. However, based on our review of the historical report *Phase I Environmental Site Assessment (ESA) - 845 Burloak Drive, Oakville, Ontario, Prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd, dated February 2010*, it included subcontracting Ecolog ERIS to obtain the title information for the Site from the applicable Land Registry Office through access to the electronic Land Titles system. The findings of the search showed that in 2004, the property was transferred from 1427814 Ontario Limited to Petro-Canada. Petro-Canada was since purchased by Suncor. The Land Title Search results are provided in Appendix III.

In addition to the 2010 Terrapex Phase One ESA, Terrapex reviewed the 2003 JWEL" *Historical Review and Site Visit- Undeveloped Lot - Southeast corner of Burloak Drive and South Service Road, Oakville, Ontario, prepared for Petro-Canada by Jacques Whitford Environment Limited (JWEL), dated May 15, 2003"* report which included a Chain of Title. Based on our review, no previous owners would be considered to result in a potential environmental concern for the Site. The JWEL Chain of Title search results are also provided in Appendix III.

SUMMARY OF CHAIN OF TITLE

YEARS	NAME OF OWNER	OTHER INFORMATION
2004-Present	Petro-Canada (currently under Suncor)	Operating Retail Fuel Outlet.
2001-2004	1427814 Ontario Limited	Vacant
1998-2001	Rehani Development Corporation	Vacant
1984 - 1998	Petro-Canada Products Inc.	Vacant
1809 -1984	Various private residential owners	Vacant

4.1.5 Copy of Land Registry

A Land Registry was not ordered as part of this Phase One ESA. However, A Land Registry was provided in Appendix V in the previous report titled *Historical Review and Site Visit- Undeveloped Lot - Southeast corner of Burloak Drive and South Service Road, Oakville, Ontario, prepared for Petro-Canada by Jacques Whitford Environment Limited (JWEL), dated May 15, 2003.*

4.1.6 Environmental Reports

Terrapex was provided with the following previous environmental reports for review as part of the scope of the current Phase One ESA.

- Historical Review and Site Visit- Undeveloped Lot - Southeast corner of Burloak Drive and South Service Road, Oakville, Ontario, prepared for Petro-Canada by Jacques Whitford Environment Limited (JWEL), dated May 15, 2003.
- Environmental Subsurface Investigation prepared for Petro-Canada, by Jacques Whitford Environment Limited (JWEL), dated February 4, 2004.
- Phase I Environmental Site Assessment (ESA) - 845 Burloak Drive, Oakville, Ontario, Prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd, dated February 2010.
- Phase II Environmental Site Assessment (ESA)- Southeast Corner of Burloak and Wyecroft Streets, Oakville, Ontario, Prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd, dated March 2010.

A copy of the JWEL reports is provided in Appendix VI and a copy of Terrapex previous environmental reports is provided in Appendix VII. A summary of the aforementioned previous environmental report(s) is provided in the following tables.

Jacques Whitford Environment Limited, May 15, 2003, Historical Review and Site Visit

Identified PCAs	On-Site: No PCAs identified Off-Site: The report did identify an ESSO gas station 40m NW of the Site that was constructed in late 2002. At the time of the report, the gas station had not opened that long therefore was not considered a potential environmental concern.
Identified APECs	None identified at the Site
Comments/Limitations/Other	Information on other properties within the Phase One Study Area was limited.

.Jacques Whitford Environmental Limited, February 4, 2004. Environmental Subsurface Investigation Report.

Work Program	11 boreholes to depths ranging between 2.3 to 4.6 m bg.
Site Condition Standards Applied	MOE Table B (non-potable), industrial/commercial, medium-fine grained soil (the current applicable SCS would be Table 3 I/C/C)
Stratigraphy and Groundwater	Topsoil underlain by silty clay with trace shale fragments to approx. depths ranging from 1.5-2.6 m bg and underlain by shale bedrock, groundwater level depths ranged from 0.38 m bg to 2.52 m bg (December 30, 2003). Groundwater flow is inferred to the west - southwest of the Site.
Analytical Program	• Soil ◦ 11 samples were submitted for benzene, toluene, ethylbenzene, xylenes (BTEX) and TPH (gas/diesel); ◦ Four samples were submitted for metals;1 composite sample was submitted for Triazine Herbicides, Organochlorine Pesticides and polycyclic aromatic hydrocarbons (PAHs); and, ◦ One composite sample for O.Reg 558 waste classification for inorganics (with select metals), PCBs, ignitibility, volatile organic compounds (VOCs) and semi-VOCs. • Groundwater: ◦ Three samples for BTEX, TPH (gas/diesel) and selected metal parameters.

Results	• Soil: ◦ Concentration of all parameters were below the MOE Table B criteria and the current MECP Table 3 SCS. ◦ Groundwater:Concentration of all parameters were below the MOE Table B criteria and the current MECP Table 3 SCS.
Comments / Limitations / Other	No soil or groundwater impacts were identified on the Phase One property

Terrapex Environmental Ltd., Phase I Environmental Site Assessment, February 2010

Identified PCAs	• On-Site: ◦ No PCAs identified as the Site was a vacant land • Off-Site: ◦ the presence of the adjacent retail fuel outlet to the west and the presence of a refinery to the east of the Site were identified as PCAs. In our opinion the refinery is not a PCA due to distance from the Site and the fact that it is cross-gradient.
Identified APECs	• Due to the presence of the retail fuel outlet adjacent to the subject site, it is expected that this facility be a potential source of soil and ground water impacts at the subject site.
Comments/Limitations/Other	• No other potential or actual environmental concerns were identified. NOTE : The Phase One was completed to assess the undeveloped portion of 845 Burloak Drive to support the severance of the surplus portion of the property for sale, therefore the retail gas station on 845 Burloak Drive was considered to be “off-site” for the purposes of the Phase One ESA.

Terrapex Environmental Ltd., Phase II Environmental Site Assessment, March 2010

Work Program	• 5 boreholes to depths of approximately 5.8 m to 6.7 m below grade • 5 monitoring wells
Site Condition Standards Applied	• O.Reg. 153/04, the Table 2 Site Condition Standards (SCS) for use in a potable groundwater situation at commercial/ industrial lands are applicable (medium to fine grained SCS were chosen based on grain size analysis)
Stratigraphy and Groundwater	• The stratigraphy at the site comprised surficial top soil to depths of approximately 0.1 m overlying at least 1.5 m of silt and clay. This silt and clay layer is overlying at least 5.0 m of Queenston Shale. • groundwater levels depths ranged from 2.56 mbg to 3.82 mbg (January 11, 2010)

Analytical Program	• Soil ◦ Five samples were submitted for BTEX and petroleum hydrocarbon fractions F1-F4 (PHCs F1 - F4). • Groundwater: ◦ Five samples were submitted for BTEX and PHCs F1 - F4. ◦ One blind field duplicate was submitted for BTEX and PHCs F1 - F4.
Results	• Soil: ◦ Concentrations of BTEX and PHC F1 and F4 were less than the applicable O.Reg 153/04 Table 2 SCS in all samples. • Groundwater: ◦ Concentrations of BTEX and PHC F1 and F4 were less than the applicable O.Reg 153/04 Table 2 SCS in all samples.
Comments / Limitations / Other	• No soil or groundwater impacts were identified on the Phase Two property NOTE : The Phase Two was completed to assess the undeveloped portion of 845 Burloak Drive to support the severance of the surplus portion of the property for sale, therefore the retail gas station on 845 Burloak Drive was considered to be “off-site” for the purposes of the Phase Two ESA.

4.1.7 Property Use Records

After reviewing the 2003 JWEL and the 2010 Terrapex reports, prior to the development of the Site as a gas station in 2004, no past Site activities were identified that might be considered as possible contaminating activities for the Site.

A City Directory Search was provided in Terrapex 2010 Phase I ESA and summarized in the table below.

SUMMARY OF CITY DIRECTORY INFORMATION

Address	Proximity[1]	Years(s)	Listing(s)	Potential PCAs[2] / Concerns
677 Burloak Drive	34.18 m east and southeast	1984 to 2008	Address Not Listed	N/A
3549 Wyecroft Road	54.37 m Northwest	2003	Address Not Listed	N/A
5530 Harvester Road (Burlington)	72.73 m south and southwest			

Address	Proximity[1]	Years(s)	Listing(s)	Potential PCAs[2] / Concerns
3531 Wyecroft Road	92.07 m North	2000	Address Not Listed	N/A
		1994	Long Manufacturing Ltd aftermarket div	None
	72.73 m south and southwest	2000 to 2008	Vacant	N/A
		1984 to 1989	Address Not Listed	N/A
5539 Harvester Road (Burlington)	119.73 m West	2008	Esso retail fuel outlet and a Tim Horton's restaurant	28 - Gasoline and Associated Products Storage in Fixed Tanks
		1984 to 2003	Address Not Listed	N/A

[1] *Direction and approximate distance to nearest Site boundary*

[2] *As set out in Table 2 in Schedule D of O. Reg. 153/04.*

4.2 ENVIRONMENTAL SOURCE INFORMATION

4.2.1 ERIS Environmental Databases

Terrapex ordered a RSC (Urban) database report from Environmental Risk Information Services (ERIS) for any records associated with the Site and properties within the Phase One Study Area. ERIS searched government and privately owned databases for environmental source information, including the information and documents listed in paragraph 7 of subsection 3 (2) in Schedule D of O. Reg. 153/04.

The report from ERIS is reproduced in Appendix II and presents information for the records found, a Site diagram which plots the locations of the properties for which records were found (provided sufficient address information was available), as well as an appendix which contains a list and descriptions of the databases ERIS searched.

Address	Proximity[1]	Database	Year(s)[2]	Details	PCA[3]s/ Potential Concerns
845 Burloak Drive	On Site	Fuel storage tank	2004	Records indicate to the presence of four underground fuel storage tanks, 3 -5000 L double wall USTs for gasoline, 1-35000 L double wall UST for diesel.	28 - Gasoline and Associated Products Storage in Fixed Tanks
3549 Wyecroft Rd	NW - 54.4 m	Spill	2009	Unknown quantity of grease spill to the road	Other - Spill
5539 Harvester Road	W - 119.7 m	Fuel storage tank	2002	The address is registered as a waste generator of light fuels, waste oils/sludges (petroleum based) and records indicate to the presence of three underground fuel storage tanks, 3 -4640 L double wall USTs for gasoline (installed in 2002).	28 - Gasoline and Associated Products Storage in Fixed Tanks

Address	Proximity[1]	Database	Year(s)[2]	Details	PCA[3]s/ Potential Concerns
835 Syscon Court	S - 166.1 m	Ontario Regulation 347 Waste Generators Summary	1994-2022	The address is registered as a waste generator of acid and alkaline solutions - (containing metals, heavy metals, and non-metals), wastes from the use of pigments, coatings and paints, aromatic and aliphatic solvents and residues, waste compressed gases including cylinders, petroleum distillates, emulsified oils, misc. wastes and inorganic chemicals.	43 - Plastics (including Fibreglass) Manufacturing and Processing
835 Syscon Court	S - 166.1 m	Spill	1996	60 L of fuel spilled to the ground and the Catch basin	Other - Spill
5490 Harvester Road	SW - 185.3 m	Scott's Manufacturing Directory	2004	The address is registered as “All other miscellaneous fabricated metal product manufacturing”	34 - Metal Fabrication

Address	Proximity[1]	Database	Year(s)[2]	Details	PCA[3]s/ Potential Concerns
945 Syscon Road	W - 210.0 m	Scott's Manufacturing Directory	1993 - 2001	The address is registered as a fabricated plate work, sheet metal work, metal stampings, and industrial and commercial machinery and equipment.	33 - Metal Treatment, Coating, Plating and Finishing 34 - Metal Fabrication
Canadian National Railway- CN Tracks near Burloak Dr	SE - 219.9 m	Spill	1988	Engine leaked 675 L o fuel to track bed	Other - Spill
5499 Harvester Road	WSW - 222.3 m	Ontario Regulation 347 Waste Generators Summary	2009 - 2020	The address is a registered waste generator of Waste crankcase oils and lubricants, petroleum distillates, Wastes from the use of pigments, coatings and paints	27 - Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles.

Address	Proximity[1]	Database	Year(s)[2]	Details	PCA[3]s/ Potential Concerns
5499 Harvester Road	WSW - 222.3 m	Scott's Manufacturing Directory	1978	The address is a manufacturer Motor vehicle seating and interior trim manufacturing, all other plastic product manufacturing, other new motor vehicle parts and accessories wholesaler-distributors, textile bag and canvas mills,	54 - Textile Manufacturing and Processing57 - Vehicles and Associated Parts Manufacturing 57 - Vehicles and Associated Parts Manufacturing 43 - Plastics (including Fibreglass) Manufacturing and Processing

[1] *direction and approximate distance to the nearest Site boundary*

[2] *For SCT listings, the year is the year the company was established.*

[3] *As set out in Table 2 in Schedule D of O. Reg. 153/04.*

4.2.2 Other Government and Regulatory Documentation

Terrapex contacted representatives of provincial and municipal government agencies to request any environmental information in their files related to the Site, and/or any available information pertaining to nearby water bodies and areas of natural significance within the Phase One Study Area. Terrapex also conducted searches of available information provided on government websites. The responses received from the government agencies, as well as the additional information obtained through website searches, are summarized in the following sections. Copies of relevant documents and maps are included in Appendix III.

Ontario Ministry of the Environment, Conservation and Parks: On January 9, 2024, a request for information was submitted to the Ontario Ministry of the Environment, Conservation and Parks (MECP) Freedom of Information, Protection of Privacy Office for information in their files regarding the Site that pertain to any Environmental Concerns, Orders and Spills. In a response dated January 9, 2024, the MECP confirms that, after conducting a thorough search of its source system applications, the ministry may hold the following records:

- Waste Generator number/classes,
- Correspondence, Abatement, Occurrence reports
- Sewage Approval
- Industrial Approval

A request for these records was submitted. However, a written response from the MECP typically requires several months. If upon receipt of the response from the MECP, any significant environmental issues are identified, Terrapex will forward our response as an addendum to this report.

Terrapex reviewed the Source Water Protection Information Atlas compiled by the MECP to determine Wellhead and Intake Protection Zones in the vicinity of the Site. There are no Wellhead or Intake Protection Zones within the Phase One Study Area.

In accordance with MECP *Client's Guide to Preliminary Screening for Species at Risk (MECP)*, Terrapex determined that there are no threatened or endangered species likely to occur within, or within 30 m of, the Site.

Terrapex reviewed ESA Habitat Regulation (O. Reg. 832/21) to identify potential areas of significant habitat for threatened and endangered species and determined that there are no such areas within, or within 30 m of the Site.

Technical Standards & Safety Authority: The Technical Standards & Safety Authority (TSSA) was contacted regarding records of fuel storage tanks at the Site and neighboring sites. Terrapex received a response from TSSA on November 03, 2023. The TSSA indicated the presence of six records of active fuel storage tanks associated with the address 5539 Harvester Road.

Terrapex reviewed the previous Terrapex 2010 Phase I ESA report. The TSSA indicated the property was listed as a Petro-Canada self-serve gasoline station with a propane
Cylinder exchange service. Records indicate that the facility has a total liquid fuel capacity of 185,000-L: one 35,000-L double wall fiberglass fuel UST, and three 50,000-L double wall fiberglass fuel UST. All fuel USTs were installed in 2004.

Ontario Ministry of Natural Resources and Forestry: Terrapex conducted a search of the information provided on the Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) on-line map of Natural Heritage Areas to identify any environmentally sensitive areas or areas of natural significance within the Phase One Study Area. The following records were evaluated:

- Provincial Parks and Conservation Reserves;
- Areas of Natural and Scientific Interest (life science or earth science);
- Provincially significant Wetlands;
- Niagara Escarpment Natural and Protection Areas;
- Oak Ridges Moraine Natural Core or Natural Linkage Areas;
- Wilderness Area.

Search results indicated that there are no Provincial Parks, Conservation Reserves, Areas of Natural or Scientific Interest, Wilderness Areas or Wetlands in the Phase One Study Area. The Site and Phase One Study Area are not within the boundaries of the Oak Ridges Moraine or the Niagara Escarpment Planning area.

Upper Tier Municipality: Based on a review of the Regional Municipality of Halton Official Plan, the Site is not located within or adjacent to lands that are designated as Environmentally Significant Areas or Natural Heritage.

Lower Tier Municipality: Based on a review of the Town of Oakville Official Plan, the Site is not located within or adjacent to lands that are designated as Environmentally Significant Areas or Natural Heritage.

Local Conservation Authority: Mapping available on the Conservation Halton website indicates that the Site is within the Sheldon Creek Watershed. Accordingly, surface water drainage from the Site (other than what is captured into the municipal storm water sewer system) may ultimately flow to this water body.

4.2.3 Client File Information

Suncor Energy Products Partnership provided a Surveyor's Real Property Report, entitled *Part of Lot 35, Concession 3, South of Dundas Street Registered Town of Oakville Regional Municipality of Halton*, prepared by Sexton McKay Limited (unstamped), dated March 21, 2024. (reproduced in Appendix I).

Terrapex was also provided with the following previous reports for review as part of the scope of the current Phase One ESA:

- Historical Review and Site Visit- Undeveloped Lot - Southeast corner of Burloak Drive and South Service Road, Oakville, Ontario, prepared for Petro-Canada by Jacques Whitford Environment Limited (JWEL), dated May 15, 2003.
- Environmental Subsurface Investigation prepared for Petro-Canada, by Jacques Whitford Environment Limited (JWEL), dated February 4, 2004.

- Phase I Environmental Site Assessment (ESA) - 845 Burloak Drive, Oakville, Ontario, Prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd, dated February 2010.
- Phase II Environmental Site Assessment (ESA)- Southeast Corner of Burloak and Wyecroft Streets, Oakville, Ontario, Prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd, dated March 2010.

A copy of the JWEL reports is provided in Appendix VI and a copy of Terrapex's previous environmental reports is provided in Appendix VII. The findings of reports were summarized in section 4.1.6. Other documents that were provided by the client included a Plot Plan of the Site, Foundation Inspections, Rebar Inspections and Cast-in-Place Concrete Reports. Copies of the documents provided by the client are included in Appendix VI.

No other file information relating to the Site was available from the client.

4.3 PHYSICAL SETTING SOURCES

4.3.1 Aerial Photographs

Aerial photographs were selected (based on availability, quality, and scale) for review to identify changes to topographic features, as well as development of the site and surrounding properties within the Phase One Study Area over the years. The earliest aerial photograph obtained for review was from the year 1954. An approximate 10-year intervening time frame between successive photographs/images was considered to be sufficient to permit a reasonable evaluation of the area development and apparent land use history.

The relevant features identified in the aerial photographs and satellite images are summarized in the table below. It should be noted that identification of some specific features at the Site and surrounding areas was precluded by the scale and resolution of the aerial photographs. Copies of the aerial photographs and the satellite images are included in Appendix IV.

SUMMARY OF AERIAL PHOTOGRAPHS AND SATELLITE IMAGES

Year	Source	Key Features - Site	Key Features - Surroundings	Possible PCAs/ APECs
1954	Town of Oakville	• No structures are visible on the Site. • Site appears to be a used as a farm or a vacant land.	• Surroundings are agricultural with a few structures in the Study Area. • Burloak Drive is constructed to the southeast of the Site. • Railroad track located to the south of the Site	• None Identified.

Year	Source	Key Features - Site	Key Features - Surroundings	Possible PCAs/ APECs
1965	ERIS	• Similar to 1954	• Generally similar to 1954. • Features of rural roadway located along the southeast borders of the Study Area.	• None Identified.
1979	Town of Oakville	• Similar to 1965	• Generally similar to 1965. • Harvester Road and Syscon Road and Syscon Court were constructed.	• None Identified.
1995	Town of Oakville	• Similar to 1979	• A ramp to highway 403 northwest of the Site was constructed. • Business developments associated with the addresses 945 Syscon Road, 835 Syscon Court, 5530, 5510, and 5490 Harvester Road. • Paving and asphalt manufacturing industry associated with the address 850 Syscon Court.	• None Identified.
2002	Town of Oakville	• Similar to 1995	• Similar to 1995 except it looks like a communications tower was built southeast of the Site.	• None identified
2008	Town of Oakville	• The Site is developed into a gas station	• Similar to 2002, in addition to the industrial development on 5499 Harvester Road, and the commercial developments on the portion of the Study Area located to the northwest of the Burloak Drive and Wyecroft Road intersection, north of the Site. • A gas station constructed on 5539 Harvester Road. • Wyecroft Road was constructed to the north of the Site. • A water pond (assumed stormwater) is visible approximately 219 m to the east of the Site.	• 28 - Gasoline and Associated Products Storage in Fixed Tanks
2019	Town of Oakville	• Same as 2008	• Same as 2008	• Same as 2008
2022	ERIS	• Same as 2019	• Same as 2019 in addition to features of a pathway across 677 Burloak Drive	• Same as 2019

Based on the review of the aerial photographs and satellite images described above, the surrounding properties within the Phase One Study Area south of Burloak Avenue comprised industrial and

commercial land use since at least 1995, with the properties north of Burloak Avenue starting be developed into commercial properties between 2002 and 2008. Prior to this the area appears to have been sued for agricultural operations (atleast up to 1979).

Based on the above, the land uses at surrounding properties identified from the review of aerial photographs and satellite imagery are considered to represent a potential concern for the environmental quality of soil and groundwater at the Site.

4.3.2 Topography, Hydrology, Geology

A topographic map of the Site and Phase One Study area was obtained as a part of the ERIS report. Geological plans for the Site were also reviewed. A summary of reviewed information is presented in the table below:

SUMMARY OF TOPOGRAPHY, HYDROLOGY AND GEOLOGY

Site & Regional Topography:	The Site is generally flat. No major topographic features are mapped on the Site. The Phase One Study Area generally slopes to the south towards a Bronte Creek, located approximately 250 m from the Site.
Approximate Elevation:	The elevation of the Site is approximately 110 m above mean sea level (amsl).
Physiography and Soil Stratigraphy:	The Site is located in a physiographic region known as the Iroquois Plain, conditions varying from sandy soils, underlain by clay to the flat lake plain with bedrock at shallow depths.The quarternary geology of the Site and surrounding area is formed by predominantly silt to silty clay matrix, high in matrix carbonate content and clast poor.
Bedrock and Approximate Depth:	The bedrock in the area of the property would likely be consist of Upper Ordovician shale, limestone, dolostone, and siltstone of the Queenston Formation at approximately 2.0 m bgs.

The topographic map is reproduced in Appendix V.

4.3.3 Fill Materials

Fill materials are possible to be present at the Site in an unknown quality or quantity of engineered sand/gravel fill used during construction of the gas station and associated parking area.

4.3.4 Water Bodies and Areas of Natural Significance

Based on a review of information and records in the preceding sections, a summary of water bodies, areas of natural significance, if any, and groundwater information within the Phase One study area are summarized in the table below.

WATER BODIES AND AREAS OF NATURAL SIGNIFICANCE

Surface Water:	The Site does not include, and is not adjacent to, or within 30 m of a water body, as defined in O. Reg. 153/04. The nearest water body is Bronte Creek, located approximately 250 m from the Site. This water body ultimately discharges into Lake Ontario, a known regional groundwater discharge zone.
Area of Natural Significance:	No ANSI were identified at the Site or within the Phase One Study Area.
Wellhead and Intake Protection Zones	The Site and the Study Area are not within any Wellhead Protection Zone or Intake Protection Zone. Source Protection Area of the Site and the Study Area is Halton Region
Municipal Drinking Water System	The Site is supplied via a municipal distribution system that derives its water from Lake Ontario.

4.3.5 Well Records

Based on a review of information provided in the ERIS report, there is one well on Site and thirty one wells within the Phase One Study Area. The well locations are indicated in the ERIS report (Appendix II) and on Figure 3. All the identified wells on the Site and the Study Area were monitoring and testing wells, and none were identified as used for domestic or agricultural water supply.

4.4 SITE OPERATING RECORDS

Site operating records specific to an enhanced investigation property were not made available to Terrapex for review.

5.0 INTERVIEWS

5.1 SITE REPRESENTATIVE

Suncor Energy Products Partnership representative with knowledge of the Site was interviewed by Terrapex. Relevant information obtained during the interview is summarized below.

SUMMARY OF SITE-KNOWLEDGEABLE PERSON INTERVIEW

Name and Position of Knowledgeable Person:	Donna Wojtanowski Asset Management Advisor
Interview Date:	November 16, 2023 (Online)
Span of Knowledge:	10 Years
Site History, Use(s):	Site was developed in 2004. Prior to that, it was used for agricultural purposes.
Knowledge of Previous Environmental Reports:	Reports were provided
Current or Previous Fuel or Chemical Storage:	Gasoline and diesel
Knowledge of Spills, Leaks, Discharges:	No

The statements and information provided by Donna Wojtanowski were consistent with information obtained from other sources as part of the Phase One ESA investigation. Donna flagged that the property had received a notice of violation or other similar claim from a regulatory agency for environmental discharge, improper hazardous materials/waste storage or disposal on site, or other environmental issue. However, no further details were provided.

5.2 SURROUNDING PROPERTY REPRESENTATIVE

Surrounding property representatives were not contacted as part of this work program.

6.0 SITE RECONNAISSANCE

6.1 GENERAL REQUIREMENTS

The reconnaissance of the Site and the Phase One Study Area was conducted by Terrapex, as follows:

SITE RECONNAISSANCE PARTICULARS

Date, Time and Duration of Investigation	Weather Conditions	Guide	Occupant / Use of Facility During the Investigation	Enhanced Investigation Property[1]	Names and Qualifications of Persons Conducting the Investigation
17 November 2023 for 1h 45mins	Rain	N/A	Petro-Canada	Yes	Wahida Nashreen , MSc, P.Eng. Environmental Engineer

[1] *As per clause 32 (1) of O. Reg.153/04*

Cursory observations of the surrounding properties within the Phase One Study Area made during the Site reconnaissance were limited to areas visible from the Site or from publicly accessible areas and vantage points. During the Site reconnaissance, Terrapex photographed the general Site layout, as well as any specific environmental concerns identified on the Site or on surrounding properties within the Phase One Study Area.

Specific limitations encountered during the Site reconnaissance are provided in Section 3.3.

The Site location plan is shown on Figure 1. The site layout is shown on Figure 2. Selected photographs including general descriptions are provided in Appendix VIII.

6.2 SPECIFIC OBSERVATIONS AT PHASE ONE PROPERTY

6.2.1 Site Description

The Site is located at 845 Burloak Drive, accessed from Burloak Drive and Wyecroft Road. At the time of inspection, the Site was operating as a retail fuel outlet, car wash, and convenience store. A summary of the constructed features of the Site is provided in the table below.

STRUCTURES AND OTHER SITE IMPROVEMENTS

Feature	Quantity	Age	Description	Location
Building(s):	3	Approximately 20 years	Convenience store, car wash, and garbage enclosure	Central, northeastern, and eastern portions of the Site
Below-Grade Structures:	5	Approximately 20 years	Three underground storage tanks, oil water separator, and a reclaim storage tank	Southwest and northeast portions of the Site
Other Structures:	1	Approximately 20 years	Pump island canopy and a pad mount transformer	Central, Around the Site.
Paved Areas:	1	Approximately 20 years	Parking lot	Majority of the Site is paved with green spaces on the perimeter

6.2.2 Storage Tanks

A summary of the storage tank(s) observed at the Site during the inspection is provided in the table below.

SUMMARY OF STORAGE TANKS OBSERVED AT THE SITE

Tank ID	Construction	Age (yrs)	Contents	Volume (L)	Status	Location
Not Available	Fiberglass double Wall UST (four underground tanks)	2004	Liquid Fuel	Three gasoline tanks (50000 L each) and one diesel tank (35000 L)	Active	Eastern portion of the Site

6.2.3 Water Sources

A summary of the non-potable water sources is provided in the table below.

Source	Quantity	Age	Description	Location
Non-Potable Water	NA	2004	Municipal storm sewer and municipal sanitary sewer	

6.2.4 Underground Utilities

A summary of the buried utilities at the Site based on inquiries and observations at the Site is provided in the table below.

UTILITIES PRESENT ON SITE

Utility	Present on Site	Description & Location
Electrical	Yes	Around the property borders and electric power lines across the vicinity of the Site.
Gas	Yes	A gas line in front of the store and a line behind the car wash.
Oil/Fuel	Yes	A gas line in front of the store and a line behind the car wash.
Sewer	Yes	A network of sewer lines across the vicinity of the Site.
Water	Yes	A water line at the northeastern portion of the Site between the store and the car wash.
Communications	No	None identified

6.2.5 Interior Features of Buildings and Structures

The interior features of buildings and structures present at the Site are summarized in the table below.

INTERIOR FEATURES OF BUILDINGS AND STRUCTURES

Feature	Convenience Store	Car Wash Station	Storage Enclosure	Pump Island with canopy
Construction	Flat roof, metal sidings, no basement, ceiling tiles and floor tiles.	Flat roof, metal siding, interceptor.	Metal sidings, flat roof, no basement.	metal posts, flat roof
Exit / Entry Points	Southwest of the building	Entry: Southeast of the car wash Exit: northwest of the car wash	Northewest of the storage enclosure	Ease, west, north, south of the pump island.
Heating System	Forced air operated electrically.	N/A	N/A	N/A
Cooling System	Central AC	N/A	N/A	N/A

Feature	Convenience Store	Car Wash Station	Storage Enclosure	Pump Island with canopy
Drains / Pits / Sumps	Washroom	N/A	N/A	N/A
Unidentified Substances	N/A	N/A	N/A	N/A
Stains / Corrosion on Floors	No	No	No	No

6.2.6 Exterior Observations

A summary of observations of the exterior features of the Site is provided in the table below.

OBSERVATIONS OF EXTERIOR FEATURES

Feature	Details	Approximate Location
Sewage Works	Manholes and catch basins	Across the vicinity of the Site
Oil / Gas or Water Wells	None observed	N/A
Ground Surface	Paved - Flat	The Site
Railway Lines / Spurs	Railway Line	Approximately 200 m south east of the Site
Stained Soil / Vegetation / Pavement	Stained pavement	Beside the diesel pump, east side of the building
Stressed Vegetation	None	None
Areas of Fill / Debris	None	None
Potential PCA[1]	28 - Gasoline and Associated Products Storage in Fixed Tanks	The entire Site
Unidentified Substances	None	N/A

[1] *As set out in Table 2 in Schedule D of O. Reg. 153/04, or otherwise as determined by the QP.*

6.2.7 Enhanced Investigation Property

The use of the Site as a retail fuel outlet renders the Site as an Enhanced Investigation Property. A summary of other specific observations/details is presented in the table below.

ENHANCED INVESTIGATION PROPERTY FEATURES AND OBSERVATIONS

Feature	Details	Approximate Location
Operations	Liquid fuel storage tanks and a car wash station	Western and eastern portions of the Site
Hazardous Materials	None	N/A
Products Manufactured	None	N/A
By-Products / Wastes	None	N/A
Raw Materials Handling & Storage	None	N/A
Drums, Totes, Bins	Garbage bins for general garbage	Northeast of the Site
Oil / Water Separators	Interceptor beside the car wash station to the west	Beside the car wash station to the west
Vehicle & Equipment Maintenance	None	N/A
Spills	minor spill (based on staining observed at diesel pumps.	diesel pump island
Liquid Discharge Points	Gas station - fuel filling outlets	Central and eastern portion of the Site (gas and diesel pumps)
Processing / Manufacturing Equipment & Operations	None	N/A
Hydraulic Lift Equipment	None	N/A

6.3 PHASE ONE STUDY AREA, OTHER THAN PHASE ONE PROPERTY

A summary of the observations from reconnaissance of the Phase One Study Area is provided in the table below.

Feature	Details	Approximate Location
Land Use	Wyecroft Road and commercial buildings beyond	North
	Burloak Drive and Wyecroft Road intersection with commercial and industrial buildings beyond	West

Feature	Details	Approximate Location
	Vacant Land (under construction) and Burloak Drive	South
	Vacant land (under construction)	East
Water Body	None	None
Area(s) of Natural Significance	None	None
Municipal Drinking Water System	Yes	N/A
Well(s) for Consumption / Agricultural Use	None	None
PCA[1]	28 - Gasoline and Associated Products Storage in Fixed Tanks	On-site

[1]*As set out in Table 2 in Schedule D of O. Reg. 153/04, or otherwise as determined by the QP.*

6.4 WRITTEN DESCRIPTION OF INVESTIGATION

The site reconnaissance was conducted to identify, describe, and document specific items at the Site and at surrounding properties within the Phase One Study Area, in accordance with Schedule D of O. Reg. 153/04. Written descriptions detailing the observations made by Terrapex personnel during the site reconnaissance are provided above in Sections 6.2 and 6.3, for the Site and the Phase One Study Area, respectively.

Discussions regarding the identification of PCAs on the Site and on surrounding properties with the Phase One Study Area are provided below in Section 7.2.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 CURRENT AND PAST USES

The current registered owner of the Site is Suncor Energy Products Partnership, which has owned the property since 2004. The Site was first developed, as a gas station in 2004 . Prior to that, it was vacant /agricultural since at least 1954. A summary of the current and past uses of the property is provided in Table 1 appended to this report.

7.2 POTENTIALLY CONTAMINATING ACTIVITY

Based on the review, evaluation, and interpretation of the information obtained from the records review, interviews, and site reconnaissance, two PCAs were identified on the Site and Ten PCAs were identified within the Phase One Study Area. Details regarding the PCAs are provided in the Tables 2A and 2B appended to this report. Refer to Figure 3 for the location of the PCAs with respect to the Site and the Phase One Study Area limits.

7.3 AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

An area of potential environmental concern (APEC), as defined in O. Reg. 153/04, is the area on, in, or under a Phase One Property where one or more contaminants are potentially present, as determined through the Phase One environmental site assessment, including through, (a) identification of past or present uses on, in or under the Phase One Property and (b) identification of potentially contaminating activity.

A total of three APECs were identified pertaining to the site as detailed in Table 3 appended to this report, and shown on Figure 4.

7.4 PHASE ONE CONCEPTUAL SITE MODEL

The Phase One Conceptual Site Model (CSM) has been developed based on the findings of the records review, site reconnaissance, and interviews completed to date as described by the foregoing sections of this report. The Phase One CSM consists of the following narrative and referenced figures.

7.4.1 Conceptual Site Model Figures

The Phase One CSM includes the following figures appended to this report:

PHASE ONE CSM FIGURES

Requisite Feature	Figure
i. Show any existing buildings and structures,	Figure 2: General Site Layout
ii. Identify and locate water bodies located in whole or in part in the Phase One Study Area,	Figure 1: Site Location, and; Figure 3: Phase One Study Area and Surrounding Land Uses
iii. Identify and locate any areas of natural significance located in whole or in part on the Phase One Study Area,	None Identified
iv. Locate any drinking water wells at the Phase One Property	None Identifed
v. Show roads, including names, within the Phase One Study Area,	Figure 3: Phase One Study Area and Surrounding Land Uses
vi. Show uses of properties adjacent to the Phase One Property,	Figure 3: Phase One Study Area and Surrounding Land Uses
vii. Identify and locate areas where any potentially contaminating activity has occurred, and show tanks in such areas,	Figure 4 Conceptual Site Model – Potentially Contaminating Activities
viii. Identify and locate any areas of potential environmental concern.	Figure 5 Conceptual Site Model – Areas of Potential Environmental Concern

7.4.2 Conceptual Site Model Narrative

The Phase One CSM comprises the narrative provided in the following table:

PHASE ONE CSM NARRATIVE

Requisite Component	Description & Assessment
i. Areas where potentially contaminating activity on, or potentially affecting the Phase One Property has occurred,	**APEC 1**: PCA1: 28 - Gasoline and Associated Products Storage in Fixed Tanks, **APEC 2:** PCA2: 55- Transformer manufacturing Processing and Use. **APEC 3:** PCA 3 (30 - Imporation of Fill Material of Unknown Quality) **APEC 4 :** PCA 4 (28 - Gasoline and Associated Products Storage in Fixed Tanks) Please refer to Table 3 “Areas of Potential Environmental Concern” appended.
ii. Any contaminants of potential concern,	BTEX, PHCs (F1 - F4), Metals and Inorganics, PAHs, PCBs Please refer to Table 3 “Areas of Potential Environmental Concern” appended.

Requisite Component	Description & Assessment
iii. The potential for underground utilities, if present, to affect contaminant distribution and transport,	In general, potential migration pathways for subsurface contaminants at the Site would consist of buried services or remnants of former buried services. such pathways have been identified during the study.
iv. Available regional or site specific geological and hydrogeological information, and	**Site & Regional Topography:** Site is generally flat with no significant grade difference. Regional grade generally slopes to the south towards Lake Ontario **Approximate Elevation:** 110 m asl **Physiography and Soil Stratigraphy:** The quarternary geology of the Site and surrounding area is formed by predominantly silt to silty clay matrix, high in matrix carbonate content and clast poor. **Bedrock and Approximate Depth:** The bedrock in the area of the property would likely be consist of Upper Ordovician, comprised of shale, and dolomite. **Surface Water:** The Site does not include, and is not adjacent to, or within 30 m of a water body, as defined in O. Reg. 153/04. The nearest water body is a Bronte Creek, located approximately 250 m from the Site. This water body ultimately discharges into Lake Ontario, a known regional groundwater discharge zone. **Area of Natural Significance:** None within, or within 30 m of, the Phase One Property, or within the Phase One Study Area. **Wellhead Protection Area:** None located within the Phase One Property, or within the Phase One Study Area. **Municipal Drinking Water System:** All properties are deemed to be connected to the municipal drinking water system supplied by the City of Oakville. **Well For Consumption/ Agricultural Use:** None currently or previously located within the Site, or within the Phase One Study Area.
v. How uncertainty or absence of information obtained in each of the components of the Phase One ESA could affect the validity of the model.	The main uncertainty associated with the CSM developed for the Site relates to the limited information regarding the former use of the Site as well, as the limited information regarding activities on neighboring properties. Not withstanding the above, it should be noted that Phase One ESAs have inherent limitations, and therefore findings cannot be considered definitive (i.e., the findings of a Phase One ESA are inherently associated with some uncertainty).

7.4.3 Exemptions for De-Icing Agents, Excess Soil, and Drinking Water

The following table describes the rationale pertaining to any applicable reliance on exemptions provided by Paragraphs 1, 1.1 and 2 of Section 49.1 of O. Reg. 153/04.

RELIANCE ON EXEMPTIONS

Exemption(s) Circumstances	Rationale
(1.) Substance(s) applied to surfaces for safety of vehicular or pedestrian traffic under conditions of snow or ice or both.	Not relied upon for the Phase One
(1.1) Excess soil deposited at the property for final placement meets the soil quality standards that apply to the property as determined in accordance with the Excess Soil Standards.	Not relied upon.
(2.) There has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002.	Not relied upon.

7.4.4 Exemption relating to Naturally Occurring Concentrations

Paragraph 3 of Section 49.1 of O. Reg. 153/04 considers an applicable site condition standard as not exceeded if the concentrations do not exceed the naturally occurring range of concentrations typically found within the vicinity of the Site.

Paragraph 3 of Section 49.1 is not being relied upon for the Phase One ESA

8.0 CONCLUSIONS

8.1 WHETHER PHASE TWO ESA REQUIRED BEFORE RSC SUBMITTED

Based on the findings and results of the Phase One ESA, prior to and in support of any future re-development, it is recommended that an adequate Phase Two ESA be completed (in general accordance with O. Reg. 153/04), to further investigate the areas of potential environmental concern identified for the Site.

8.2 RSC BASED ON PHASE ONE ESA ALONE

A RSC cannot be filed for the Phase One Property based solely on this Phase One ESA.

8.3 SIGNATURES

The environmental assessment described herein was conducted in accordance with the terms of reference for this project, as agreed upon by Suncor Energy Products Partnership and Terrapex Environmental Ltd.

The Phase One Environmental Site Assessment of the property located at 845 Burloak Drive, Oakville, Ontario which included the review, evaluation, and interpretation of the information obtained from the records review, interviews, and site reconnaissance has been conducted in general accordance with Ontario Regulation 153/04 (Records of Site Condition – Part XV.1 of the Environmental Protection Act), made under the *Environmental Protection Act*, by or under the supervision of a Qualified Person. The qualifications of the assessors are included in Appendix IX.

In assessing the environmental conditions and history of the Site, Terrapex Environmental Ltd. has relied in good faith on information provided by others, as noted in this report, and has assumed the information provided to our firm is factual and accurate. Observations of the surrounding properties within the Phase One Study Area were limited to areas visible from the site or from publicly accessible areas and vantage points. Terrapex Environmental Ltd. accepts no responsibility for any deficiency, misstatement, or inaccuracy in this report resulting from the information provided by others. Further, Terrapex Environmental Ltd. shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the Phase One Environmental Site Assessment was conducted.

Terrapex Environmental Ltd. has exercised due care, diligence, and judgement in the performance of this Phase One Environmental Site Assessment; however, studies of this nature have inherent limitations. This report is intended to provide only a general assessment of the environmental conditions encountered at the Site. By necessity, the findings and observations regarding actual or potential contamination of the property are based solely on the extent of observations and

information gathered during the Phase One Environmental Site Assessment, and subsequent investigations of differing scope may reveal conflicting results. Findings and observations may also change with the passage of time.

This report has been prepared for the sole use of Suncor Energy Products Partnership. Terrapex Environmental Ltd. accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Suncor Energy Products Partnership.

Respectfully submitted,

TERRAPEX ENVIRONMENTAL LTD.

Seba Hamdan MASc. EIT
Environmental Scientist

Geoff Lussier, Dipl.
Senior Project Manager

Craig Beaton, PEng, QP_{ESA}
Senior Reviewer

9.0 REFERENCES

Regulations and Guidelines

Ontario Regulation 153/04, Records of Site Condition – Part XV.1 of the Environmental Protection Act

Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011

Previous Reports

Historical Review and Site Visit, Undeveloped Lot - Southeast Corner of Burloak Drive and South Service Road, Oakville, Ontario, dated May 15, 2003, prepared by Jacques Whitford Environmental Limited (JWEL), prepared for Petro-Canada (2003 JWEL)

Subsurface Investigation Report- 845 Burloak Drive (at South Service Road), Oakville, Ontario, dated February 4, 2004, prepared by JWEL, prepared for Petro-Canada (2004 JWEL)

Phase I Environmental Site Assessment, prepared for Suncor Energy Products Inc. by Terrapex Environmental Ltd., dated February 2010 (2010A Terrapex)

Phase II Environmental Site Assessment, for Suncor Energy Products Inc. by Terrapex Environmental Ltd., March 2, 2010. (2010B Terrapex)

Site Plans:

Part of Lot 35, Concession 3, South of Dundas Street Registered Town of Oakville Regional Municipality of Halton, prepared by Sexton McKay Limited (unstamped), dated March 21, 2024

Environmental Source Information:

Ontario Ministry of the Environment (MOE), Ministry of the Environment and Climate Change (MOECC) and Ministry of the Environment, Conservation and Parks (MECP) documents and databases:

- Inventory of Coal Gasification Plant Waste Sites in Ontario, Volume II (April 1987), prepared for MOE by Intera Technologies Ltd. (Intera)
- Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, Volume I (November 1988), prepared for MOE by Intera
- Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, Volume II (November 1988), prepared for MOE by Intera
- Waste Disposal Site Inventory (June 1991)
- MOECC Brownfields Environmental Site Registry website

Federal government, provincial government, and private source database records available through ERIS Information Inc. (ERIS) for locations within 300 m of the Site.

Regulatory file information and documentation regarding environmental concerns related to the site, and/or information pertaining to water bodies and areas of natural significance within the Phase One Study Area, available from:

- MECP Freedom of Information and Protection of Privacy Office
- Ontario Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Area on-line mapping
- Technical Standards & Safety Authority (TSSA) Fuels Safety Division

Physical Setting Sources:

Aerial photographs for the years 1954, 1965, 1979, 1995, 2002, 2008, and 2019 available from the Town of Oakville website. Metropolitan Toronto Archives, and for the year 2022 available from Maxar Technologies and provided in ERIS report.

Topographic Map: National Topographic Systems (NTS), Energy, Mines and Resources Canada, (1:50,000), Atlas of Canada Toporama mapping, available from the Natural Resources Canada website: http://atlas.nrcan.gc.ca/site/english/index.html, updated 2010.

MNR 1:10,000 scale Ontario Base Map (OBM) of Toronto, Ontario, based on 1979 aerial photography.

The Physiography of Southern Ontario, Third Edition, Ontario Geological Survey Special Volume 2 (1984), Chapman and Putnam, map provided by ERIS.

Ontario Geological Survey map entitled Surficial Geology of southern Ontario, map provided by ERIS.

Ontario Geological Survey map entitled Bedrock Geology of Ontario, map provided by ERIS.

Ontario Ministry of Agriculture and Food, Ministry of Natural Resources, Soil Survey Complex (ON Soils), Soil Survey Complex (ON Soils), map provided by ERIS.

Well record information available from ERIS on the Water Well Information System databases and from the MOECC Environmental Monitoring and Reporting Branch Water Well Information System, on-line mapping application

Interviews:

Interview on November 16, 2023 with Ms. Donna Wojtanowski, Asset Management Advisor of Suncor Energy.

TABLES

TABLE 1: Current and Past Uses of the Phase One Property

Year	Name of Owner	Description Of Property Use	Property Use	Other Observations From Aerial Photographs, Fire Insurance Plans, Etc.
Pre-1954	Unknown	Rural/agricultural (no structures)	Possibly Crown lands/ Agriculture	Aerial Photographs: • In 1954, the site is vacant and undeveloped
1954 - 2004	Unknown	Rural/agricultural (no structures)	Agricultural	Aerial Photographs: • The site is vacant and undeveloped
2004 - Present	Suncor Energy Products Partnership	Commercial	Gas station and a car wash	Underground fuel storage tank

TABLE 2A: POTENTIALLY CONTAMINATING ACTIVITIES ON, IN OR UNDER THE PHASE ONE PROPERTY

PCA[1]	Potentially Contaminating Activity[2]	Description	Data Source	Area(s) of Potential Environmental Concern	Likelihood To Affect The Site / Rationale	Uncertainty
PCA 1	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site USTs for gasoline and diesel in addition to the on-Site oil/water separator	- Site inspection - Interviews - ERIS Report	APEC 1	High	Low
PCA 2	55 - Transformer manufacturing, processing and use.	Pad mounted transformer located in eastern portion of the Site	- Site Inspection	APEC 2	Low	Moderate
PCA 3	30 - Importation of Fill Material of Unknown Quality	Entire Site	-Aerial Photos	APEC 3	Moderate	Low

[1] *As shown on Figure 3.*

[2] *As set out in Table 2 in Schedule D of O. Reg. 153/04.*

TABLE 2B: POTENTIALLY CONTAMINATING ACTIVITIES WITHIN THE PHASE ONE STUDY AREA

PCA	Potentially Contaminating Activity[1]	Address / Location	Description	Data Source	Area(s) of Potential Environmental Concern	Likelihood To Affect The Site / Rationale	Uncertainty
PCA 4	28 - Gasoline and Associated Products Storage in Fixed Tanks	5539 Harvester Rd	Retail Fuel Outlet	- Aerial photographs - Eris Report - Site inspection	APEC 4	Possible –based on the assumed groundwater flow direction to the east and southeast	Low

PCA	Potentially Contaminating Activity[1]	Address / Location	Description	Data Source	Area(s) of Potential Environmental Concern	Likelihood To Affect The Site / Rationale	Uncertainty
PCA 5A	43 - Plastics (including Fibreglass) Manufacturing and Processing	5499 Harvester Rd	All Other Plastic Product Manufacturing	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 5B	54 - Textile Manufacturing and Processing	5499 Harvester Rd	Textile Bag and Canvas Mills	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 5C	57 - Vehicles and Associated Parts Manufacturing	5499 Harvester Rd	Motor Vehicle Seating and Interior Trim Manufacturing, as well as new motor parts and accessories.	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 6A	33 - Metal Treatment, Coating, Plating and Finishing	945 Syscon Road	The address is registered as a fabricated plate work, sheet metal work, metal stampings, and industrial and commercial machinery and equipment.	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low

PCA	Potentially Contaminating Activity[1]	Address / Location	Description	Data Source	Area(s) of Potential Environmental Concern	Likelihood To Affect The Site / Rationale	Uncertainty
PCA 6B	34 - Metal Fabrication	945 Syscon Road	The address is registered as a fabricated plate work, sheet metal work, metal stampings, and industrial and commercial machinery and equipment.	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 7A	43 - Plastics (including Fibreglass) Manufacturing and Processing	835 Syscon Court	The address is registered as a waste generator of acid and alkaline solutions -(containing metals, heavy metals, and non-metals), wastes from the use of pigments, coatings and paints, aromatic and aliphatic solvents and residues, waste compressed gases including cylinders, petroleum distillates, emulsified oils, misc. Wastes and inorganic chemicals.	- ERIS report	No	Very unlikely based on distance (approx. 166 m) and the anticipated groundwater flow direction to the east and southeast	Low

PCA	Potentially Contaminating Activity[1]	Address / Location	Description	Data Source	Area(s) of Potential Environmental Concern	Likelihood To Affect The Site / Rationale	Uncertainty
PCA 7B	Other - spill	835 Syscon Court	60 L fuel oil spill to ground and a catchbasin	- ERIS report	No	Very unlikely based on distance (approx. 166 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 8	34 - Metal Fabrication	5490 Harvester Rd	The address is registered as a steel wire drawing, and all other fabricated metal production	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low
PCA 9	46 - Rail Yards, Tracks and Spurs	Canadian National Railway- CN Tracks near Burloak Dr	The address is a rail trail	- ERIS report	No	Very unlikely based on distance (over 200 m) and the anticipated groundwater flow direction to the east and southeast	Low

[1] *As set out in Table 2 in Schedule D of O. Reg. 153/04.*

TABLE 3: AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

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	Media Potentially Impacted
APEC 1 (PCA 1)	Entire site	28 - Gasoline and Associated Products Storage in Fixed Tanks	On-Site	BTEX, PHCs (F1 - F4), Metals and Inorganics, PAHs.	Soil Groundwater
APEC 2 (PCA 2)	Eastern portion of the Site (around transformer)	55 - Transformer manufacturing, processing and use.	On-Site	PCBs	Soil
APEC 3 (PCA 3)	Entire Site	30 - Importation of Fill Material of Unknown Quality	On-Site	BTEX, PHCs (F1 - F4), Metals and Inorganics, PAHs.	Soil Groundwater
APEC 4 (PCA 4)	Southwestern portion of the Site	28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	BTEX, PHCs (F1 - F4), Metals and Inorganics, PAHs.	Soil Groundwater

[1] Areas of potential environmental concern means the area on, in or under a Phase One Property where one or more contaminants are potentially present, as determined through the Phase One environmental site assessment, including through,

(a) identification of past or present uses on, in or under the Phase One Property, and

(b) identification of potentially contaminating activity.

[2] Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One study area.

[3] When completing this column, identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", March 9, 2004, amended as of July 1, 2011, as specified below:

Figures

LEGEND

SITE BOUNDARY

DATA SOURCE: ESRI
MAP PROJECTION: NAD 1983 UTM Zone 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
SITE LOCATION

DRAWN BY: JS	PROJECT NO.: CT3959.00	CHECKED BY: SH
REVISION: 00	DATE: February 2024	**FIGURE: 1**

jserroul C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG 1 SITE LOCATION.mxd

LEGEND

SITE BOUNDARY

0 10 20 30
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
GENERAL SITE LAYOUT

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	SJS
REVISION:	DATE:	FIGURE:
00	February 2024	**2**

C:\Users\JSerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG 2 GENERAL SITE LAYOUT.mxd

LEGEND

- SITE BOUNDARY
- STUDY AREA
- MECP WATER WELL RECORDS
- CANADIAN NATIONAL RAILWAY

0 50 100 150
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
PHASE ONE STUDY AREA AND SURROUNDING LAND USES

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	SH
REVISION: 00	DATE: February 2024	FIGURE: 3

C:\Users\JSerrouit\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG 3 STUDY AREA.mxd

LEGEND

- SITE BOUNDARY
- STUDY AREA

POTENTIALLY CONTAMINATING ACTIVITIES

- ON-SITE PCA LEADING TO APEC
- OFF-SITE PCA LEADING TO APEC
- OFF-SITE PCA NOT LEADING TO APEC

POTENTIALLY CONTAMINATING ACTIVITY TYPES

28. GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS

30. IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY

33. METAL TREATMENT, COATING, PLATING AND FINISHING

34. METAL FABRICATION

43. PLASTICS (INCLUDING FIBREGLASS) MANUFACTURING AND PROCESSING

46. RAIL YARDS, TRACKS AND SPURS

54. TEXTILE MANUFACTURING AND PROCESSING

55. TRANSFORMER MANUFACTURING, PROCESSING AND USE

57. VEHICLES AND ASSOCIATED PARTS MANUFACTURING

OT1. OTHER - SPILL

NOTE:

● PCA ID (PCA TYPE)

REFER TO THE REPORT FOR ADDITIONAL DETAILS.

0 50 100 150 200

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE, OAKVILLE, ONTARIO

TERRAPEX

TITLE: **CONCEPTUAL SITE MODEL AND POTENITALLY CONTAMINATING ACTIVITIES**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
XX	CT3959.00	GLL
REVISION:	DATE:	FIGURE:
00	FEBRUARY 2024	4

C:\Users\s.finlay\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG 4 CSM - PCAs.mxd

C:\Users\s.finlay\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG 5 CSM - APECs.mxd

LEGEND

POTENTIALLY CONTAMINATING ACTIVITIES

- ON-SITE PCA LEADING TO APEC
- OFF-SITE PCA LEADING TO APEC

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

- APEC-1
- APEC-2
- APEC-3 (ENTIRE PROPERTY)
- APEC-4

APEC	PCA ID	PCA TYPE	DESCRIPTION
1	1	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
2	2	55	TRANSFORMER MANUFACTURING, PROCESSING AND USE
3	3	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
4	4	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS

0 10 20 30
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE: **CONCEPTUAL SITE MODEL - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
XX	CT3959.00	GLL
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: **5**

Appendix I Plan of Survey

I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT,

DATE : _____ , 2010

C. A. SEXTON
ONTARIO LAND SURVEYOR

PLAN 20R-

RECEIVED AND DEPOSITED :

DATE : _____ , 2010

DEP. LAND REGISTRAR FOR THE LAND TITLES DIVISION OF THE HALTON (NO.20)

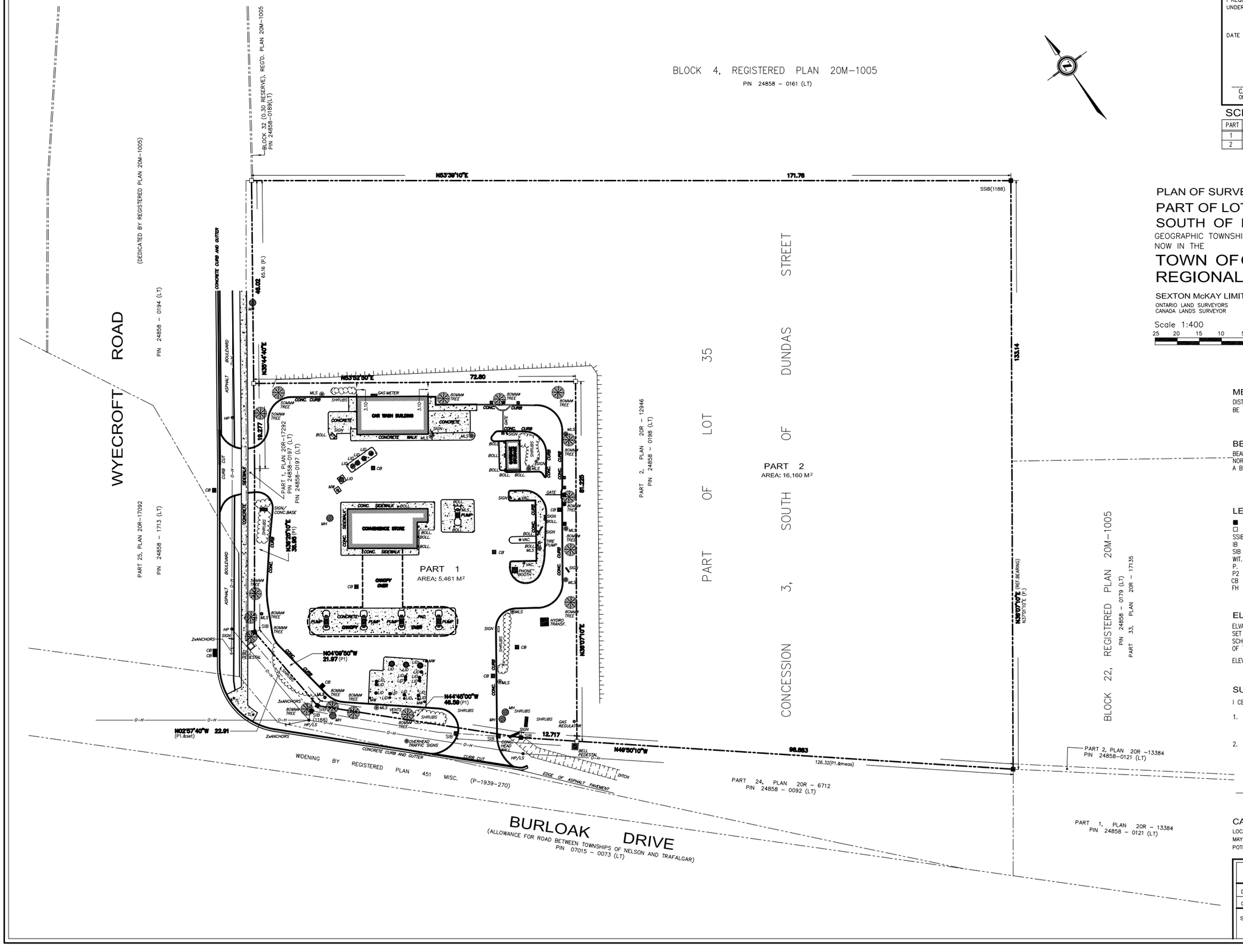
SCHEDULE

PART	LOT	CONCESSION	PIN	AREA (m^2)
1	PART OF LOT 35	CONCESSION 3 S.D.S.	24858-0198(LT)	5,461
2				16,160

PLAN OF SURVEY OF
PART OF LOT 35, CONCESSION 3, SOUTH OF DUNDAS STREET
GEOGRAPHIC TOWNSHIP OF TRAFALGAR)
NOW IN THE
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON

SEXTON McKAY LIMITED
ONTARIO LAND SURVEYORS
CANADA LANDS SURVEYOR

Scale 1:400
25 20 15 10 5 0 25 metres



METRIC NOTE:
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

BEARING NOTE
BEARINGS SHOWN HEREON ARE ASTRONOMIC AND ARE REFERRED TO THE NORTHEASTERLY LIMIT OF BLOCK 4, REGISTERED PLAN 20M-1005, HAVING A BEARING OF N36°07'10"E, IN ACCORDANCE WITH SAID PLAN.

LEGEND

■	DENOTES SURVEY MONUMENT FOUND	BOLL.	DENOTES STEEL BOLLARD
□	DENOTES SURVEY MONUMENT SET	O-H	DENOTES OVERHEAD HYDRO WIRES
SSIB	DENOTES STANDARD IRON BAR	ø	DENOTES DIAMETER
IB	DENOTES IRON BAR	TL	DENOTES TRAFFIC LIGHT
SIB	DENOTES STANDARD IRON BAR	HP/LS	DENOTES HYDRO POLE/LIGHT STANDARD
WIT.	DENOTES WITNESS	MLS	DENOTES METAL LIGHT STANDARD
P.	DENOTES PLAN 20R-12946	meas	DENOTES MEASURED
P2	DENOTES PLAN 20M-1005		
CB	DENOTES CATCH BASIN		
FH	DENOTES FIRE HYDRANT		

ELEVATION NOTE
ELVATIONS ARE DERIVED FROM CITY OF ST. CATHARINES BM NO. 8338018. BRASS TABLET SET VERTICALLY IN CONC. FOUNDATION ON MOST WESTERLY FACE OF FERNDALE PUBLIC SCHOOL ON THE SOUTHEAST CORNER OF DUNVEGAN RD. AND FERNDALE AVE., 60CM SOUTH OF THE NORTHWEST CORNER, 20CM BELOW BRICKWORK.

ELEVATION: 114.613

SURVEYOR'S CERTIFICATE
I CERTIFY THAT

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM;
2. THE SURVEY WAS COMPLETED ON THE 2ND. DAY OF MARCH, 2010.

DATE

C.A. SEXTON
ONTARIO LAND SURVEYOR

CAUTION
LOCATIONS OF ANY UNDERGROUND SERVICES ARE APPROXIMATE. OTHER BURIED UTILITIES MAY EXIST WHICH ARE NOT SHOWN BECAUSE OF INSUFFICIENT INFORMATION. CONTACT ALL POTENTIAL OWNERS OF UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION

DRAWN BY: m.l.
CHECKED BY: C. A. Sexton
JOB No. 21979W

SEXTON McKAY LIMITED - ONTARIO LAND SURVEYORS - CANADA LANDS SURVEYOR
70 EAST BEAVER CREEK ROAD UNITS 44 & 45 RICHMOND HILL ONTARIO L4B 3B2
(905)889-9103 FAX (905)889-8941

ACAD: APRIL 12, 2010

Appendix II ERIS Report

ERIS

DATABASE REPORT

Project Property:	*CT3959.00 845 Burloak Dr* *845 Burloak Dr* *Oakville ON L6L 6V9*
Project No:	*CT3959.00*
Report Type:	*RSC Report (Urban)*
Order No:	*23102300496*
Requested by:	*Terrapex Environmental Ltd.*
Date Completed:	*October 24, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:	*CT3959.00 845 Burloak Dr* *845 Burloak Dr Oakville ON L6L 6V9*
Project No:	*CT3959.00*

Order Information:

Order No:	*23102300496*
Date Requested:	*October 23, 2023*
Requested by:	*Terrapex Environmental Ltd.*
Report Type:	*RSC Report (Urban)*

Historical/Products:

ERIS Xplorer	*ERIS Xplorer*
Topographic Map	*RSC Maps*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
AAGR	*Abandoned Aggregate Inventory*	Y	0	0	0
AGR	*Aggregate Inventory*	Y	0	0	0
AMIS	*Abandoned Mine Information System*	Y	0	0	0
ANDR	*Anderson's Waste Disposal Sites*	Y	0	0	0
AST	*Aboveground Storage Tanks*	Y	0	0	0
AUWR	*Automobile Wrecking & Supplies*	Y	0	0	0
BORE	*Borehole*	Y	0	10	10
CA	*Certificates of Approval*	Y	1	9	10
CDRY	*Dry Cleaning Facilities*	Y	0	0	0
CFOT	*Commercial Fuel Oil Tanks*	Y	0	0	0
CHEM	*Chemical Manufacturers and Distributors*	Y	0	0	0
CHM	*Chemical Register*	Y	0	0	0
CNG	*Compressed Natural Gas Stations*	Y	0	0	0
COAL	*Inventory of Coal Gasification Plants and Coal Tar Sites*	Y	0	0	0
CONV	*Compliance and Convictions*	Y	0	1	1
CPU	*Certificates of Property Use*	Y	0	0	0
DRL	*Drill Hole Database*	Y	0	0	0
DTNK	*Delisted Fuel Tanks*	Y	1	1	2
EASR	*Environmental Activity and Sector Registry*	Y	0	2	2
EBR	*Environmental Registry*	Y	0	7	7
ECA	*Environmental Compliance Approval*	Y	1	11	12
EEM	*Environmental Effects Monitoring*	Y	0	0	0
EHS	*ERIS Historical Searches*	Y	5	27	32
EIIS	*Environmental Issues Inventory System*	Y	0	0	0
EMHE	*Emergency Management Historical Event*	Y	0	0	0
EPAR	*Environmental Penalty Annual Report*	Y	0	0	0
EXP	*List of Expired Fuels Safety Facilities*	Y	0	0	0
FCON	*Federal Convictions*	Y	0	0	0
FCS	*Contaminated Sites on Federal Land*	Y	0	0	0
FOFT	*Fisheries & Oceans Fuel Tanks*	Y	0	0	0
FRST	*Federal Identification Registry for Storage Tank Systems (FIRSTS)*	Y	0	0	0
FST	*Fuel Storage Tank*	Y	4	4	8
FSTH	*Fuel Storage Tank - Historic*	Y	2	1	3
GEN	*Ontario Regulation 347 Waste Generators Summary*	Y	1	82	83
GHG	*Greenhouse Gas Emissions from Large Facilities*	Y	0	0	0
HINC	*TSSA Historic Incidents*	Y	0	1	1

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	Fuel Oil Spills and Leaks	Y	0	1	1
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPR2	National Pollutant Release Inventory 1993-2020	Y	0	4	4
NPRI	National Pollutant Release Inventory - Historic	Y	0	1	1
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PFCH	NPRI Reporters - PFAS Substances	Y	0	0	0
PFHA	Potential PFAS Handers from NPRI	Y	0	0	0
PINC	Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	1	1	2
RST	Retail Fuel Storage Tanks	Y	0	1	1
SCT	Scott's Manufacturing Directory	Y	0	13	13
SPL	Ontario Spills	Y	0	11	11
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	1	31	32

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
Total:			17	219	236

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	WWIS		BURLOAK DR + WYECROFT RD Oakville ON ***Well ID:*** 7350171	SW/0.0	0.27	54
2	FSTH	2116160 ONTARIO INC O/A GAS STN	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON	ENE/0.0	0.03	57
2	FSTH	1491222 ONTARIO LTD O/A PETRO CANADA	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON L6L 6V9	ENE/0.0	0.03	57
2	EHS		845 Burloak Drive Oakville ON L6L 6V9	ENE/0.0	0.03	58
2	CA	Petro-Canada	845 Burloak Drive Oakville ON L6L 6V9	ENE/0.0	0.03	58
2	RSC	Suncor Energy Inc.	845 Burloak Drive, Oakville Ontario L6L 6V9 ON L6L 6V9	ENE/0.0	0.03	59
2	EHS		845 Burloak Dr Oakville ON L6L 6V9	ENE/0.0	0.03	59
2	FST	SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	ENE/0.0	0.03	59

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
2	FST	SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	ENE/0.0	0.03	60
2	FST	SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	ENE/0.0	0.03	60
2	FST	SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	ENE/0.0	0.03	61
2	ECA	Petro-Canada	845 Burloak Dr Oakville ON L6L 6N5	ENE/0.0	0.03	61
2	GEN	Metrolinx Capital Projects Group	845 Burloak Drive Burlington ON L6L 0C6	ENE/0.0	0.03	62
2	EHS		845 Burloak Drive Oakville ON L6M 4J7	ENE/0.0	0.03	62
2	DTNK		845 BURLOAK DR OAKVILLE ON L6M 4J7	ENE/0.0	0.03	62
2	EHS		845 Burloak Dr Oakville ON L6M 4J7	ENE/0.0	0.03	63
2	EHS		845 Burloak Dr Oakville ON L6M 4J7	ENE/0.0	0.03	63

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
3	WWIS		lot 35 con 3 ON **Well ID:** 7383889	SSE/7.5	-0.79	63
4	EHS		NW Corner of Burlock Dr and Harvester Rd Burlington ON	W/21.6	0.31	64
4	WWIS		BURLOAK DR AND WYECROFT DR Oakville ON **Well ID:** 7145164	W/21.6	0.31	64
4	CA	RRL Burloak Inc.	Burloak Drive and Wyecroft Road Oakville ON	W/21.6	0.31	73
4	SPL		Burloak Drive and Harvestor Road, Burlington Burlington ON	W/21.6	0.31	74
4	ECA	RRL Burloak Inc.	Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	W/21.6	0.31	75
4	ECA	RRL Burloak Inc.	Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	W/21.6	0.31	75
4	SPL	First Response Environmental (2012) Inc. Hamilton	Wyecroft Road & Burloak Drive Oakville, ON OAKVILLE ON	W/21.6	0.31	75
5	EHS		Wyecroft Extension Oakville ON	W/21.7	0.31	76
5	EHS		Wyecroft Extension Oakville ON	W/21.7	0.31	76
6	WWIS		. 677 Burloak Drive in Oakville lot 35 con 3 ON **Well ID:** 7406504	ESE/34.2	-0.74	76
7	WWIS		ON	ESE/49.2	-1.14	79

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
			Well ID: 7212918			
8	SPL	Kelsey's Roadhouse<UNOFFICIAL>	3549 Wyecroft Rd Oakville ON	NW/54.4	1.34	80
9	SCT	LONG MANUFACTURING LTD.	5530 HARVESTER RD BURLINGTON ON L7L 5V4	SSW/72.7	0.30	81
9	EHS		5530 Harvester Rd Burlington ON L7L5V4	SSW/72.7	0.30	81
9	GEN	OLG	5530 HARVESTER RD BURLINGTON ON L7L 5V4	SSW/72.7	0.30	82
9	GEN	Ontario Lottery and Gaming	5530 Harvester Rd Burlington ON L7L 5V4	SSW/72.7	0.30	82
9	EHS		5530 Harvester Road Burlington ON L7L 5V4	SSW/72.7	0.30	82
9	EHS		5530 Harvester Road Burlington ON L7L 5V4	SSW/72.7	0.30	83
10	WWIS		ON ***Well ID:*** 7376613	N/75.0	0.59	83
11	GEN	EllisDon Civil Ltd. LSW - Burloak	677 Burloak Dr Oakville ON L6L 6V9	SE/79.9	-1.79	84
12	WWIS		HARVESTER RD NEAR BURLOAK DR Burlington ON ***Well ID:*** 7351616	WSW/83.4	0.30	84
13	EHS		677 burloak drive, oakville Oakville ON	E/86.2	-2.09	87
13	EHS		677 burloak drive, oakville Oakville ON	E/86.2	-2.09	87
14	INC		3531 WYECROFT ROAD, OAKVILLE ON	N/92.1	1.43	88

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
15	EHS		677 Burloak Drive Oakville ON L6L 6V9	E/94.7	-2.29	88
15	EHS		677 Burloak Drive Oakville ON L6L 6V9	E/94.7	-2.29	89
16	WWIS		ON ***Well ID:*** 7270758	SSW/106.5	-0.39	89
17	RST	BURLOAK HARVESTER ESSO	5539 HARVESTER RD BURLINGTON ON L7L 7G4	W/119.7	2.55	90
17	FSTH	2074065 ONTARIO INC O/A GAS STN	5539 HARVESTER RD BURLINGTON ON L7L 7G4	W/119.7	2.55	90
17	CA	Imperial Oil Limited	5539 Harvester Rd Burlington ON L7L 7G4	W/119.7	2.55	90
17	FST	MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	W/119.7	2.55	91
17	FST	MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	W/119.7	2.55	91
17	FST	MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	W/119.7	2.55	92
17	FST	MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	W/119.7	2.55	92
17	EHS		5539 Harvester Road Burlington ON L7L7G4	W/119.7	2.55	93
17	ECA	Imperial Oil Limited	5539 Harvester Rd Burlington ON M3C 1K5	W/119.7	2.55	93

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
17	DTNK		5539 HARVESTER RD BURLINGTON ON L7L 5N5	W/119.7	2.55	93
18	WWIS		. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406506	ESE/126.2	-2.17	94
19	GEN	FISHER SERVICE COMPANY 15-337	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	SW/129.8	0.30	97
19	GEN	FISHER SERVICE COMPANY	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	SW/129.8	0.30	97
19	GEN	FISHER SERV(OUT OF BUSINESS)	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	SW/129.8	0.30	98
19	EHS		5510 Harvester Rd Burlington ON L7L5V4	SW/129.8	0.30	99
19	GEN	GEARS BIKE & SKI SHOPS LIMITED	5510 HARVESTER ROAD BURLINGTON ON L7L5V4	SW/129.8	0.30	99
19	GEN	GEARS BIKE & SKI SHOPS LIMITED	5510 HARVESTER ROAD BURLINGTON ON L7L5V4	SW/129.8	0.30	99
20	EHS		5510 Harvester Road Burlington ON L7L 5V4	SW/129.8	0.30	100
20	EHS		5510 Harvester Road Burlington ON L7L 5V4	SW/129.8	0.30	100
21	WWIS		lot 35 con 3 ON ***Well ID:*** 7383886	SE/133.2	-2.00	100
22	SPL		3543 Wyecroft Road W UTM Zone: 17 Easting: 601366 Northing: 4805579 Oakville ON	NW/135.3	3.45	101
23	WWIS		926 BURLOAK DR Burlington ON ***Well ID:*** 7246268	WNW/158.4	4.27	102

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
24	WWIS		926 BURLOAK DR Burlington ON ***Well ID:*** 7246269	WNW/160.4	4.39	104
25	CA	TWINPAK INC.	835 SYSCON COURT BURLINGTON CITY ON L7L 6C5	S/166.1	-1.67	106
25	SCT	BERICAP INC.	835 SYSCON CRT BURLINGTON ON L7L 6C5	S/166.1	-1.67	106
25	SPL	TRIMAC TRANSPORTATION SERVICES	835 SYSCON COURT TRANSPORT TRUCK (CARGO) BURLINGTON CITY ON L7L 6C5	S/166.1	-1.67	107
25	SCT	TWINPAK INC	835 SYSCON RD BURLINGTON ON L7L 6C5	S/166.1	-1.67	107
25	SCT	BERICAP CANADA INC.	835 SYSCON CRT BURLINGTON ON L7L 6C5	S/166.1	-1.67	108
25	SCT	Bericap North America Inc.	835 Syscon Crt Burlington ON L7L 6C5	S/166.1	-1.67	108
25	GEN	TWINPAK INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	108
25	GEN	TWINPAK INC. 37-814	835 SYSCON COURT BURLINGTON BURLINGTON ON L7L 6C5	S/166.1	-1.67	109
25	GEN	TWINPAK INC. 37-814	835 SYSCON COURT BURLINGTON C/O 1840 TRANS-CANADA HIGHWAY BURLINGTON ON L7L 6C5	S/166.1	-1.67	109
25	GEN	TWIN(SEE & USE ON2275500)	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	110
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	110
25	EBR	Bericap Inc.	835 Syscon Court Burlington Ontario L7L 6C5 Burlington ON	S/166.1	-1.67	111

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
25	CA	Bericap Inc.	835 Syscon Court Burlington ON L7L 6C5	S/166.1	-1.67	112
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	112
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	113
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	113
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	114
25	EBR	Bericap Inc.	835 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON ON	S/166.1	-1.67	115
25	NPRI	BERICAP NORTH AMERICA INC.	835 SYSCON CRT BURLINGTON ON L7L6C5	S/166.1	-1.67	116
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON	S/166.1	-1.67	118
25	SPL	Trimac Transportation Service Ltd.	835 Syscon Court Burlington ON	S/166.1	-1.67	119
25	ECA	Bericap Inc.	835 Syscon Court Burlington ON L7L 6C5	S/166.1	-1.67	120
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	120
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	121

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	122
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	123
25	ECA	Bericap Inc.	835 Syscon Crt Burlington ON L7L 6C5	S/166.1	-1.67	125
25	EHS		835 Syscon Court Burlington ON L7L 6C5	S/166.1	-1.67	125
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	125
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	126
25	EASR	BERICAP INC	835 SYSCON CRT BURLINGTON ON L7L 6C5	S/166.1	-1.67	128
25	GEN	BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	S/166.1	-1.67	128
25	NPR2	BERICAP INC.	835 SYSCON BURLINGTON ON	S/166.1	-1.67	129
25	NPR2	BERICAP NORTH AMERICA INC.	835 SYSCON COURT BURLINGTON ON L7L6C5	S/166.1	-1.67	138
26	WWIS		926 BURLOAK DR Burlington ON ***Well ID:*** 7246270	WNW/169.4	4.38	144
27	WWIS		926 BURLOAK DR Burlington ON ***Well ID:*** 7246265	WNW/171.6	4.47	146
28	WWIS		BURLOAK DR Burlington ON ***Well ID:*** 7350189	SE/172.6	-2.72	149

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
29	BORE		ON	SE/172.8	-2.67	152
30	WWIS		lot 35 con 3 ON ***Well ID:*** 7385748	ESE/173.5	-2.68	153
31	BORE		ON	SE/183.9	-2.71	154
32	BORE		ON	SE/184.1	-2.70	155
33	GEN	FAB INDUSTRIES INC.	5490 HARVESTER ROAD BURLINGTON ON L7L 5V4	SW/185.3	0.30	156
33	GEN	Precision Metal Cutting Inc.	5490 Harvester Road Burlington ON L7L 5V4	SW/185.3	0.30	156
33	SCT	Precision Metal Cutting	5490 Harvester Rd Burlington ON L7L 5V4	SW/185.3	0.30	157
33	GEN	Navona Realty Services Inc.	5490 Harvester Road Burlington ON L7L 5V4	SW/185.3	0.30	157
33	EBR	CF + D Custom Fireplace Design Inc.	5490 Harvester Road Burlington, Regional Municipality of Halton CITY OF BURLINGTON ON	SW/185.3	0.30	157
33	GEN	ACCESS SECURITY	5490 HARVESTER ROAD UNIT #1 BURLINGTON ON L7L 5V4	SW/185.3	0.30	158
34	WWIS		HARVESTER RD NEAR BURLOAK DR Burlington ON ***Well ID:*** 7351617	SW/188.9	0.30	158
35	BORE		ON	SE/189.6	-2.73	161
36	BORE		ON	SE/190.5	-2.58	162

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
37	WWIS		burloak dr. ON **Well ID:** 7355159	SE/193.6	-2.74	163
38	WWIS		. 677 Burloak Drive in Oakville lot 35 con 3 ON **Well ID:** 7406503	NE/194.3	-1.76	166
39	WWIS		ON **Well ID:** 7376612	NE/195.7	-1.38	169
40	WWIS		ON **Well ID:** 7216932	W/199.4	5.06	170
41	WWIS		. 677 Burloak Drive in Oakville lot 35 con 3 ON **Well ID:** 7406505	E/200.8	-3.69	171
42	WWIS		. 677 Burloak Drive in Oakville lot 35 con 3 ON **Well ID:** 7406502	ENE/202.5	-4.65	174
43	BORE		ON	SE/202.7	-3.07	176
44	EHS		3529, 3537 and 3543 Wyecroft Road Oakville ON L6L 0B6	NNW/204.2	3.66	177
45	WWIS		926 BURLOAK DR Burlington ON **Well ID:** 7246266	WNW/206.8	5.30	178
45	WWIS		926 BURLOAK DR Burlington ON **Well ID:** 7246271	WNW/206.8	5.30	180
45	GEN	C & M McNally Engineering Corp.	926 Burloak Drive Burlington ON L7L0B1	WNW/206.8	5.30	182
45	GEN	C & M McNally Engineering Corp.	926 Burloak Drive Burlington ON L7L0B1	WNW/206.8	5.30	183
46	CA	HADRIAN MANUFACTURING INC.	945 SYSCON ROAD BURLINGTON CITY ON L7L 5S3	W/210.0	4.33	183

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
46	SCT	THORCO MANUFACTURING LTD.	945 SYSCON RD BURLINGTON ON L7L 5S3	W/210.0	4.33	183
46	GEN	THORCO MANUFACTURING LTD.	945 SYSCON ROAD BURLINGTON ON L7L 5S3	W/210.0	4.33	184
46	GEN	THORCO MANU(OUT OF BUSINESS)	945 SYSCON ROAD BURLINGTON ON L7L 5S3	W/210.0	4.33	184
46	GEN	HADRIAN MANUFACTURING INC.	945 SYSCON ROAD BURLINGTON ON L7L 5S3	W/210.0	4.33	185
46	EHS		945 Syscon Rd Burlington ON L7L 5S3	W/210.0	4.33	185
46	RSC	1202248 Ontario Limited	945 SYSCON RD, BURLINGTON, ON, L7L 5S2 ON L7L 5S3	W/210.0	4.33	186
47	SPL	CANADIAN NATIONAL RAILWAY	CN TRACKS NEAR BURLOAK DR. TRAIN OAKVILLE TOWN ON	SE/219.9	-3.09	186
47	EHS		Burloak and CN Rail Burlington ON	SE/219.9	-3.09	187
48	BORE		ON	SE/220.1	-3.10	187
49	SCT	Aero-Kit Industries Inc.	5499 Harvester Rd Burlington ON L7L 5V4	WSW/222.3	2.25	188
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	WSW/222.3	2.25	188
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	WSW/222.3	2.25	189
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	WSW/222.3	2.25	189

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	WSW/222.3	2.25	190
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON	WSW/222.3	2.25	190
49	GEN	Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	WSW/222.3	2.25	190
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	WSW/222.3	2.25	191
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	WSW/222.3	2.25	191
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	WSW/222.3	2.25	192
49	GEN	Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	WSW/222.3	2.25	192
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	WSW/222.3	2.25	192
49	GEN	J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD Unit B BURLINGTON ON L7L5V4	WSW/222.3	2.25	193
49	GEN	Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	WSW/222.3	2.25	193
50	BORE		ON	SE/222.8	-3.45	194
51	WWIS		926 BURLOAK DR Burlington ON ***Well ID:*** 7246267	WNW/226.3	5.30	195
52	BORE		ON	SE/226.3	-3.52	197

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
53	WWIS		ON **Well ID:** 7161240	WNW/226.8	5.30	198
54	BORE		ON	SE/228.2	-3.65	199
55	WWIS		926 BURLOAK Burlington ON **Well ID:** 7254120	WNW/228.8	5.30	200
56	WWIS		ON **Well ID:** 7194720	WSW/230.8	0.97	203
57	WWIS		ON **Well ID:** 7372336	SE/231.2	-3.59	204
58	EHS		Burloak Road Oakville ON	ESE/241.7	-3.68	205
59	WWIS		lot 1 con 3 ON **Well ID:** 7385454	SSE/242.4	-3.71	205
60	EHS		945 Syscon Road Burlington ON L7L 5S3	W/252.6	5.28	206
60	EHS		945 Syscon Road Burlington ON L7L 5S3	W/252.6	5.28	206
61	SCT	SSI EQUIPMENT INC.	5470 HARVESTER RD BURLINGTON ON L7L 5N5	SW/257.5	-0.51	206
61	EHS		5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	207
61	GEN	SSI Equipment	5470 Harvester Rd. Burlington ON L7L 5N5	SW/257.5	-0.51	207
61	SCT	Otto Bock Healthcare Canada	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	207

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	207
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	208
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	208
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	209
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	209
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	210
61	GEN	Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	SW/257.5	-0.51	210
62	EHS		n/a Oakville ON	ESE/266.2	-3.70	211
63	CA	A. CAPOBIANCO & SONS LTD.	850 SYSCON COURT BURLINGTON CITY ON L7L 6C5	SSW/283.8	-2.25	211
63	CONV	Associated Paving & Materials Ltd	850 Syscon Ct. Burlington ON L7L 6C5	SSW/283.8	-2.25	211
63	EBR	Associated Paving & Materials Ltd.	850 Syscon Court Burlington Ontario L7L 6C5 Burlington ON	SSW/283.8	-2.25	212
63	CA	Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L7L 6C5	SSW/283.8	-2.25	212
63	CA	Associated Paving & Materials Ltd.	850 Syscon Court Burlington ON L7L 6C5	SSW/283.8	-2.25	213

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
63	SCT	Associated Paving Company Ltd.	850 Syscon Crt Burlington ON L7L 6C5	SSW/283.8	-2.25	213
63	EBR	Associated Paving & Materials Ltd.	850 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON ON	SSW/283.8	-2.25	213
63	EHS		850 Syscon Crt Burlington ON L7L6C5	SSW/283.8	-2.25	214
63	ECA	Associated Paving & Materials Ltd.	850 Syscon Court Burlington ON	SSW/283.8	-2.25	214
63	ECA	Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L0P 1E0	SSW/283.8	-2.25	214
63	ECA	Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L0P 1E0	SSW/283.8	-2.25	215
63	EBR	Associated Paving & Materials Ltd.	850 Syscon Court Burlington, ON L7L 6C5 Canada ON	SSW/283.8	-2.25	215
63	ECA	Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L7L 5M7	SSW/283.8	-2.25	215
63	SPL	Associated Paving Limited	850 Syscon Crt; 5555 Prince William Drive Burlington; Burlington ON L7L 6C5;	SSW/283.8	-2.25	216
63	NPR2	ASSOCIATED PAVING & MATERIALS	850 SYSCON COURT BURLINGTON ON L7L6C5	SSW/283.8	-2.25	216
63	NPR2	ASSOCIATED PAVING & MATERIALS	850 SYSCON COURT BURLINGTON ON L7L6C5	SSW/283.8	-2.25	225
64	SPL		OAKVILLE ON	NE/289.5	0.20	231

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
65	CA	COGECO CABLE CANADA INC.	950 SYSCON ROAD BURLINGTON CITY ON	WSW/295.6	4.52	231
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	232
65	HINC		950 SYSCON ROAD BURLINGTON ON	WSW/295.6	4.52	232
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON	WSW/295.6	4.52	233
65	ECA	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	WSW/295.6	4.52	233
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON	WSW/295.6	4.52	233
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON	WSW/295.6	4.52	234
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	234
65	EASR	Cogeco Cable Canada LP	950 Syscon RD Burlington ON L7L 5J7	WSW/295.6	4.52	235
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON	WSW/295.6	4.52	235
65	SPL	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	WSW/295.6	4.52	236
65	SPL	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	WSW/295.6	4.52	236
65	EHS		950 Syscon Rd Burlington ON	WSW/295.6	4.52	237

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
65	ECA	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	238
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	238
65	GEN	Cogeco Connexion LP	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	238
65	GEN	Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	239
65	GEN	Cogeco Connexion LP ON	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	239
65	GEN	Cogeco Connexion LP ON	950 Syscon Rd Burlington ON L7R 4S6	WSW/295.6	4.52	240
65	GEN	Cogeco Connexion Ltd	950 Syscon Road Burlington ON L7R 4S6	WSW/295.6	4.52	240
66	WWIS		ON ***Well ID:*** 7372337	SE/298.5	-3.98	241
67	SCT	HADRIAN MANUFACTURING INC	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	242
67	SCT	Hadrian Manufacturing Inc.	965 Syscon Rd Burlington ON L7L 5S3	W/298.6	6.30	242
67	EBR	Hadrian Manufacturing Inc.	965 Syscon Road CITY OF BURLINGTON ON	W/298.6	6.30	242
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON ROAD BURLINGTON ON L9L 5S3	W/298.6	6.30	243
67	GEN	HADRIAN MANUFACTURING INC. 19-743	965 SYSCON ROAD BURLINGTON ON L9L 5S3	W/298.6	6.30	243

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	244
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	244
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	245
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	245
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	246
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON	W/298.6	6.30	247
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	247
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	248
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	249
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	250
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	251
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	252
67	GEN	HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	W/298.6	6.30	252

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
67	EHS		965 Syscon Rd Burlington ON L7L 5S3	W/298.6	6.30	253
67	EHS		965 Syscon Rd Burlington ON L7L 5S3	W/298.6	6.30	254

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2018 has found that there are 10 BORE site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	ON	172.8	29
	ON	183.9	31
	ON	184.1	32
	ON	189.6	35
	ON	190.5	36
	ON	202.7	43
	ON	220.1	48
	ON	222.8	50
	ON	226.3	52

Site	Address	Distance (m)	Map Key
	ON	228.2	54

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 10 CA site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Petro-Canada	845 Burloak Drive Oakville ON L6L 6V9	0.0	2
RRL Burloak Inc.	Burloak Drive and Wyecroft Road Oakville ON	21.6	4
Imperial Oil Limited	5539 Harvester Rd Burlington ON L7L 7G4	119.7	17
Bericap Inc.	835 Syscon Court Burlington ON L7L 6C5	166.1	25
TWINPAK INC.	835 SYSCON COURT BURLINGTON CITY ON L7L 6C5	166.1	25
HADRIAN MANUFACTURING INC.	945 SYSCON ROAD BURLINGTON CITY ON L7L 5S3	210.0	46
Associated Paving & Materials Ltd.	850 Syscon Court Burlington ON L7L 6C5	283.8	63
A. CAPOBIANCO & SONS LTD.	850 SYSCON COURT BURLINGTON CITY ON L7L 6C5	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L7L 6C5	283.8	63

Site	Address	Distance (m)	Map Key
COGECO CABLE CANADA INC.	950 SYSCON ROAD BURLINGTON CITY ON	295.6	65

CONV - Compliance and Convictions

A search of the CONV database, dated 1989-Sep 2023 has found that there are 1 CONV site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Associated Paving & Materials Ltd	850 Syscon Ct. Burlington ON L7L 6C5	283.8	63

DTNK - Delisted Fuel Tanks

A search of the DTNK database, dated Feb 28, 2022 has found that there are 2 DTNK site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	845 BURLOAK DR OAKVILLE ON L6M 4J7	0.0	2
	5539 HARVESTER RD BURLINGTON ON L7L 5N5	119.7	17

EASR - Environmental Activity and Sector Registry

A search of the EASR database, dated Oct 2011- Aug 31, 2023 has found that there are 2 EASR site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
BERICAP INC	835 SYSCON CRT BURLINGTON ON L7L 6C5	166.1	25
Cogeco Cable Canada LP	950 Syscon RD Burlington ON L7L 5J7	295.6	65

Site	Address	Distance (m)	Map Key

EBR - Environmental Registry

A search of the EBR database, dated 1994 - Aug 31, 2023 has found that there are 7 EBR site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Bericap Inc.	835 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON ON	166.1	25
Bericap Inc.	835 Syscon Court Burlington Ontario L7L 6C5 Burlington ON	166.1	25
CF + D Custom Fireplace Design Inc.	5490 Harvester Road Burlington, Regional Municipality of Halton CITY OF BURLINGTON ON	185.3	33
Associated Paving & Materials Ltd.	850 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON ON	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Court Burlington, ON L7L 6C5 Canada ON	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Court Burlington Ontario L7L 6C5 Burlington ON	283.8	63
Hadrian Manufacturing Inc.	965 Syscon Road CITY OF BURLINGTON ON	298.6	67

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011- Aug 31, 2023 has found that there are 12 ECA site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Petro-Canada	845 Burloak Dr Oakville ON L6L 6N5	0.0	2
RRL Burloak Inc.	Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	21.6	4
RRL Burloak Inc.	Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	21.6	4
Imperial Oil Limited	5539 Harvester Rd Burlington ON M3C 1K5	119.7	17
Bericap Inc.	835 Syscon Crt Burlington ON L7L 6C5	166.1	25
Bericap Inc.	835 Syscon Court Burlington ON L7L 6C5	166.1	25
Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L7L 5M7	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L0P 1E0	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Crt Burlington ON L0P 1E0	283.8	63
Associated Paving & Materials Ltd.	850 Syscon Court Burlington ON	283.8	63
Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	295.6	65

Site	Address	Distance (m)	Map Key

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Jun 30, 2023 has found that there are 32 EHS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	845 Burloak Drive Oakville ON L6L 6V9	0.0	2
	845 Burloak Dr Oakville ON L6L 6V9	0.0	2
	845 Burloak Drive Oakville ON L6M 4J7	0.0	2
	845 Burloak Dr Oakville ON L6M 4J7	0.0	2
	845 Burloak Dr Oakville ON L6M 4J7	0.0	2
	NW Corner of Burlock Dr and Harvester Rd Burlington ON	21.6	4
	Wyecroft Extension Oakville ON	21.7	5
	Wyecroft Extension Oakville ON	21.7	5
	5530 Harvester Rd Burlington ON L7L5V4	72.7	9

Site	Address	Distance (m)	Map Key
	5530 Harvester Road Burlington ON L7L 5V4	72.7	9
	5530 Harvester Road Burlington ON L7L 5V4	72.7	9
	677 burloak drive, oakville Oakville ON	86.2	13
	677 burloak drive, oakville Oakville ON	86.2	13
	677 Burloak Drive Oakville ON L6L 6V9	94.7	15
	677 Burloak Drive Oakville ON L6L 6V9	94.7	15
	5539 Harvester Road Burlington ON L7L7G4	119.7	17
	5510 Harvester Rd Burlington ON L7L5V4	129.8	19
	5510 Harvester Road Burlington ON L7L 5V4	129.8	20
	5510 Harvester Road Burlington ON L7L 5V4	129.8	20
	835 Syscon Court Burlington ON L7L 6C5	166.1	25
	3529, 3537 and 3543 Wyecroft Road Oakville ON L6L 0B6	204.2	44

Site	Address	Distance (m)	Map Key
	945 Syscon Rd Burlington ON L7L 5S3	210.0	46
	Burloak and CN Rail Burlington ON	219.9	47
	Burloak Road Oakville ON	241.7	58
	945 Syscon Road Burlington ON L7L 5S3	252.6	60
	945 Syscon Road Burlington ON L7L 5S3	252.6	60
	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
	n/a Oakville ON	266.2	62
	850 Syscon Crt Burlington ON L7L6C5	283.8	63
	950 Syscon Rd Burlington ON	295.6	65
	965 Syscon Rd Burlington ON L7L 5S3	298.6	67
	965 Syscon Rd Burlington ON L7L 5S3	298.6	67

FST - Fuel Storage Tank

A search of the FST database, dated Feb 28, 2022 has found that there are 8 FST site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	0.0	2
SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	0.0	2
SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	0.0	2
SUNCOR ENERGY PRODUCTS PARTNERSHIP	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	0.0	2
MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	119.7	17
MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	119.7	17
MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	119.7	17
MAC'S CONVENIENCE STORES INC	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	119.7	17

FSTH - Fuel Storage Tank - Historic

A search of the FSTH database, dated Pre-Jan 2010* has found that there are 3 FSTH site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
1491222 ONTARIO LTD O/A PETRO CANADA	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON L6L 6V9	0.0	2

Site	Address	Distance (m)	Map Key
2116160 ONTARIO INC O/A GAS STN	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON	0.0	2
2074065 ONTARIO INC O/A GAS STN	5539 HARVESTER RD BURLINGTON ON L7L 7G4	119.7	17

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Oct 31, 2022 has found that there are 83 GEN site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Metrolinx Capital Projects Group	845 Burloak Drive Burlington ON L6L 0C6	0.0	2
OLG	5530 HARVESTER RD BURLINGTON ON L7L 5V4	72.7	9
Ontario Lottery and Gaming	5530 Harvester Rd Burlington ON L7L 5V4	72.7	9
EllisDon Civil Ltd. LSW - Burloak	677 Burloak Dr Oakville ON L6L 6V9	79.9	11
FISHER SERVICE COMPANY 15-337	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	129.8	19
FISHER SERVICE COMPANY	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	129.8	19
FISHER SERV(OUT OF BUSINESS)	5510 HARVESTER ROAD BURLINGTON ON L7L 5V4	129.8	19

Site	Address	Distance (m)	Map Key
GEARS BIKE & SKI SHOPS LIMITED	5510 HARVESTER ROAD BURLINGTON ON L7L5V4	129.8	19
GEARS BIKE & SKI SHOPS LIMITED	5510 HARVESTER ROAD BURLINGTON ON L7L5V4	129.8	19
TWINPAK INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
TWINPAK INC. 37-814	835 SYSCON COURT BURLINGTON BURLINGTON ON L7L 6C5	166.1	25
TWINPAK INC. 37-814	835 SYSCON COURT BURLINGTON C/O 1840 TRANS-CANADA HIGHWAY BURLINGTON ON L7L 6C5	166.1	25
TWIN(SEE & USE ON2275500)	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON	166.1	25

Site	Address	Distance (m)	Map Key
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON COURT BURLINGTON ON L7L 6C5	166.1	25
FAB INDUSTRIES INC.	5490 HARVESTER ROAD BURLINGTON ON L7L 5V4	185.3	33
Precision Metal Cutting Inc.	5490 Harvester Road Burlington ON L7L 5V4	185.3	33
Navona Realty Services Inc.	5490 Harvester Road Burlington ON L7L 5V4	185.3	33
ACCESS SECURITY	5490 HARVESTER ROAD UNIT #1 BURLINGTON ON L7L 5V4	185.3	33

Site	Address	Distance (m)	Map Key
C & M McNally Engineering Corp.	926 Burloak Drive Burlington ON L7L0B1	206.8	45
C & M McNally Engineering Corp.	926 Burloak Drive Burlington ON L7L0B1	206.8	45
THORCO MANUFACTURING LTD.	945 SYSCON ROAD BURLINGTON ON L7L 5S3	210.0	46
THORCO MANU(OUT OF BUSINESS)	945 SYSCON ROAD BURLINGTON ON L7L 5S3	210.0	46
HADRIAN MANUFACTURING INC.	945 SYSCON ROAD BURLINGTON ON L7L 5S3	210.0	46
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON	222.3	49
Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	222.3	49

Site	Address	Distance (m)	Map Key
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	222.3	49
Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD BURLINGTON ON L7L5V4	222.3	49
J. SYVRET AND CO. LIMITED	5499 HARVESTER ROAD Unit B BURLINGTON ON L7L5V4	222.3	49
Load Covering Solutions	5499 Harvester Road Burlington ON L7L 5J7	222.3	49
SSI Equipment	5470 Harvester Rd. Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61

Site	Address	Distance (m)	Map Key
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Otto Bock Healthcare	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Connexion LP ON	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Connexion LP ON	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Connexion Ltd	950 Syscon Road Burlington ON L7R 4S6	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	295.6	65

Site	Address	Distance (m)	Map Key
Cogeco Cable Canada	950 Syscon Rd Burlington ON	295.6	65
Cogeco Cable Canada	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
Cogeco Connexion LP	950 Syscon Rd Burlington ON L7R 4S6	295.6	65
HADRIAN MANUFACTURING INC.	965 SYSCON ROAD BURLINGTON ON L9L 5S3	298.6	67
HADRIAN MANUFACTURING INC. 19-743	965 SYSCON ROAD BURLINGTON ON L9L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON	298.6	67

Site	Address	Distance (m)	Map Key
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
HADRIAN MANUFACTURING INC.	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67

HINC - TSSA Historic Incidents

A search of the HINC database, dated 2006-June 2009* has found that there are 1 HINC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	950 SYSCON ROAD BURLINGTON ON	295.6	65

INC - Fuel Oil Spills and Leaks

A search of the INC database, dated Feb 28, 2022 has found that there are 1 INC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	3531 WYECROFT ROAD, OAKVILLE ON	92.1	14

NPR2 - National Pollutant Release Inventory 1993-2020

A search of the NPR2 database, dated Sep 2020 has found that there are 4 NPR2 site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
BERICAP NORTH AMERICA INC.	835 SYSCON COURT BURLINGTON ON L7L6C5	166.1	25
BERICAP INC.	835 SYSCON BURLINGTON ON	166.1	25
ASSOCIATED PAVING & MATERIALS	850 SYSCON COURT BURLINGTON ON L7L6C5	283.8	63
ASSOCIATED PAVING & MATERIALS	850 SYSCON COURT BURLINGTON ON L7L6C5	283.8	63

NPRI - National Pollutant Release Inventory - Historic

A search of the NPRI database, dated 1993-May 2017 has found that there are 1 NPRI site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
BERICAP NORTH AMERICA INC.	835 SYSCON CRT BURLINGTON ON L7L6C5	166.1	25

RSC - Record of Site Condition

A search of the RSC database, dated 1997-Sept 2001, Oct 2004-Aug 2023 has found that there are 2 RSC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Suncor Energy Inc.	845 Burloak Drive, Oakville Ontario L6L 6V9 ON L6L 6V9	0.0	2
1202248 Ontario Limited	945 SYSCON RD, BURLINGTON, ON, L7L 5S2 ON L7L 5S3	210.0	46

RST - Retail Fuel Storage Tanks

A search of the RST database, dated 1999-Feb 28, 2023 has found that there are 1 RST site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
BURLOAK HARVESTER ESSO	5539 HARVESTER RD BURLINGTON ON L7L 7G4	119.7	17

SCT - Scott's Manufacturing Directory

A search of the SCT database, dated 1992-Mar 2011* has found that there are 13 SCT site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
LONG MANUFACTURING LTD.	5530 HARVESTER RD BURLINGTON ON L7L 5V4	72.7	9
Bericap North America Inc.	835 Syscon Crt Burlington ON L7L 6C5	166.1	25
BERICAP CANADA INC.	835 SYSCON CRT BURLINGTON ON L7L 6C5	166.1	25
TWINPAK INC	835 SYSCON RD BURLINGTON ON L7L 6C5	166.1	25
BERICAP INC.	835 SYSCON CRT BURLINGTON ON L7L 6C5	166.1	25

Site	Address	Distance (m)	Map Key
Precision Metal Cutting	5490 Harvester Rd Burlington ON L7L 5V4	185.3	33
THORCO MANUFACTURING LTD.	945 SYSCON RD BURLINGTON ON L7L 5S3	210.0	46
Aero-Kit Industries Inc.	5499 Harvester Rd Burlington ON L7L 5V4	222.3	49
Otto Bock Healthcare Canada	5470 Harvester Rd Burlington ON L7L 5N5	257.5	61
SSI EQUIPMENT INC.	5470 HARVESTER RD BURLINGTON ON L7L 5N5	257.5	61
Associated Paving Company Ltd.	850 Syscon Crt Burlington ON L7L 6C5	283.8	63
HADRIAN MANUFACTURING INC	965 SYSCON RD BURLINGTON ON L7L 5S3	298.6	67
Hadrian Manufacturing Inc.	965 Syscon Rd Burlington ON L7L 5S3	298.6	67

SPL - Ontario Spills

A search of the SPL database, dated 1988-Dec 2021; see description has found that there are 11 SPL site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	Burloak Drive and Harvestor Road, Burlington Burlington ON	21.6	4
First Response Environmental (2012) Inc. Hamilton	Wyecroft Road & Burloak Drive Oakville, ON OAKVILLE ON	21.6	4

Site	Address	Distance (m)	Map Key
Kelsey's Roadhouse<UNOFFICIAL>	3549 Wyecroft Rd Oakville ON	54.4	8
	3543 Wyecroft Road W UTM Zone: 17 Easting: 601366 Northing: 4805579 Oakville ON	135.3	22
Trimac Transportation Service Ltd.	835 Syscon Court Burlington ON	166.1	25
TRIMAC TRANSPORTATION SERVICES	835 SYSCON COURT TRANSPORT TRUCK (CARGO) BURLINGTON CITY ON L7L 6C5	166.1	25
CANADIAN NATIONAL RAILWAY	CN TRACKS NEAR BURLOAK DR. TRAIN OAKVILLE TOWN ON	219.9	47
Associated Paving Limited	850 Syscon Crt; 5555 Prince William Drive Burlington; Burlington ON L7L 6C5;	283.8	63
	OAKVILLE ON	289.5	64
Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	295.6	65
Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP	950 Syscon Rd Burlington ON	295.6	65

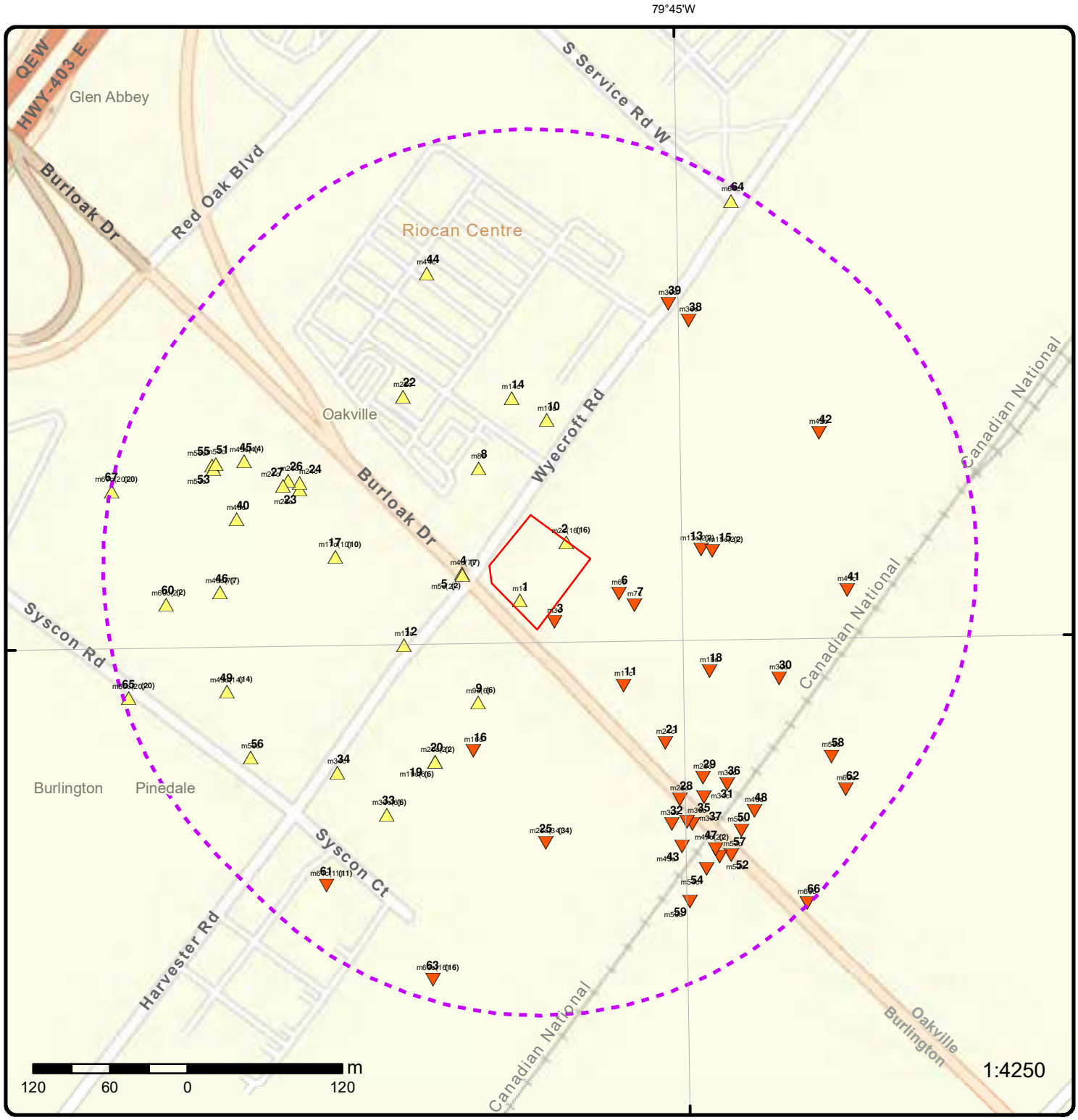
WWIS - Water Well Information System

A search of the WWIS database, dated Mar 31 2023 has found that there are 32 WWIS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	BURLOAK DR + WYECROFT RD Oakville ON ***Well ID:*** 7350171	0.0	1
	lot 35 con 3 ON ***Well ID:*** 7383889	7.5	3
	BURLOAK DR AND WYECROFT DR Oakville ON ***Well ID:*** 7145164	21.6	4
	. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406504	34.2	6
	ON ***Well ID:*** 7212918	49.2	7
	ON ***Well ID:*** 7376613	75.0	10
	HARVESTER RD NEAR BURLOAK DR Burlington ON ***Well ID:*** 7351616	83.4	12
	ON ***Well ID:*** 7270758	106.5	16
	. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406506	126.2	18
	lot 35 con 3 ON ***Well ID:*** 7383886	133.2	21
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246268	158.4	23
	926 BURLOAK DR Burlington ON	160.4	24

Site	Address	Distance (m)	Map Key
	Well ID: 7246269		
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246270	169.4	26
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246265	171.6	27
	BURLOAK DR Burlington ON ***Well ID:*** 7350189	172.6	28
	lot 35 con 3 ON ***Well ID:*** 7385748	173.5	30
	HARVESTER RD NEAR BURLOAK DR Burlington ON ***Well ID:*** 7351617	188.9	34
	burloak dr. ON ***Well ID:*** 7355159	193.6	37
	. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406503	194.3	38
	ON ***Well ID:*** 7376612	195.7	39
	ON ***Well ID:*** 7216932	199.4	40
	. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406505	200.8	41
	. 677 Burloak Drive in Oakville lot 35 con 3 ON ***Well ID:*** 7406502	202.5	42

Site	Address	Distance (m)	Map Key
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246266	206.8	45
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246271	206.8	45
	926 BURLOAK DR Burlington ON ***Well ID:*** 7246267	226.3	51
	ON ***Well ID:*** 7161240	226.8	53
	926 BURLOAK Burlington ON ***Well ID:*** 7254120	228.8	55
	ON ***Well ID:*** 7194720	230.8	56
	ON ***Well ID:*** 7372336	231.2	57
	lot 1 con 3 ON ***Well ID:*** 7385454	242.4	59
	ON ***Well ID:*** 7372337	298.5	66



Map: 0.3 Kilometer Radius

Order Number: 23102300496

Address: 845 Burloak Dr, Oakville, ON

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major Arterial; Minor Arterial
- Local Road
- Service Road; Traffic Circle; Ramp
- Rail
- Beach
- Airport
- Industrial Area
- Military Base
- Aircraft Roads
- Native Reservation
- Hospital
- Shopping & Sports Area
- University/College
- Cemetery; Golf Course
- Parkt (National)
- Park (City/County)

79°45'W

43°24'N

43°24'N

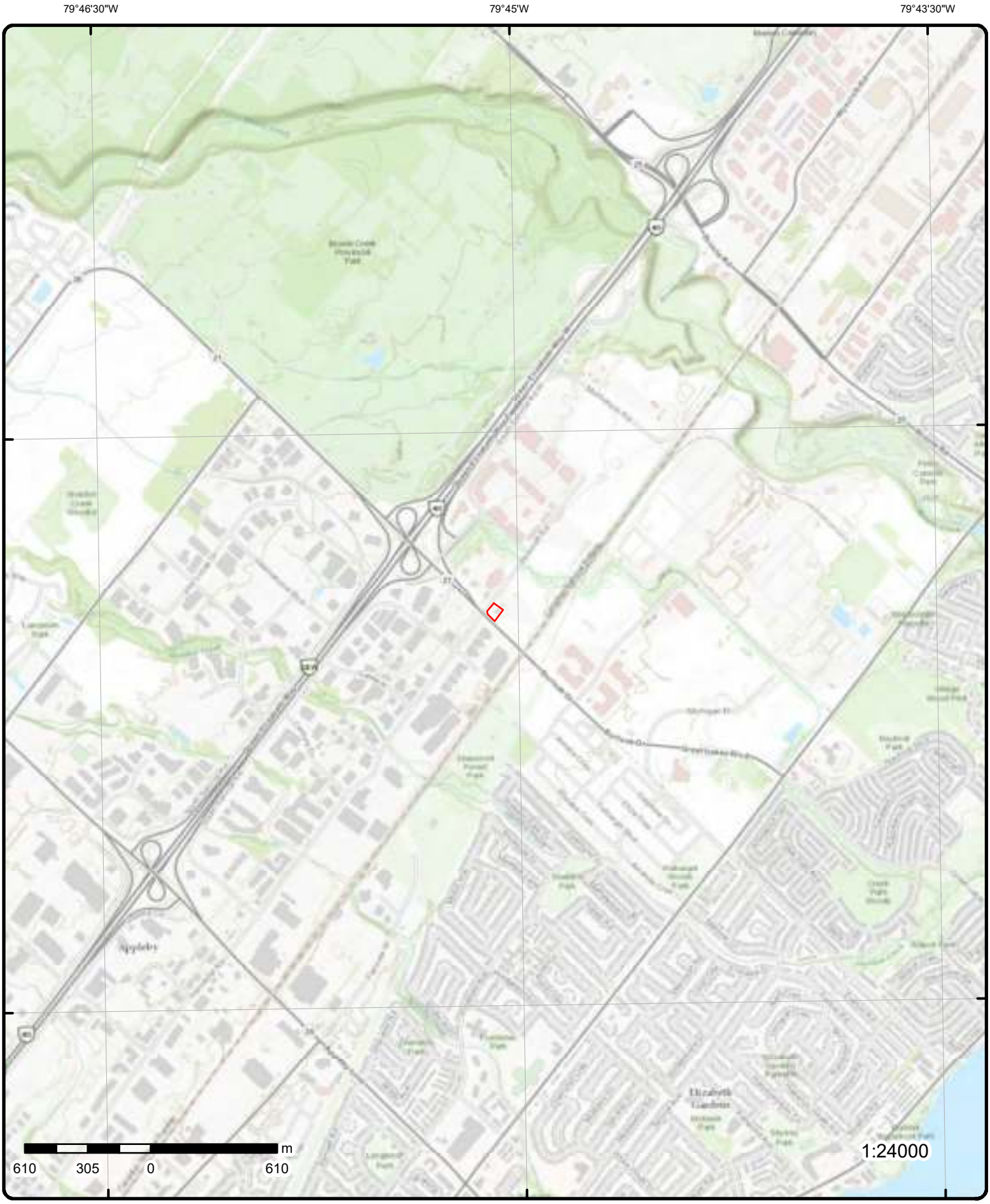
Aerial

Year: 2022

Order Number: 23102300496

Address: 845 Burloak Dr, Oakville, ON

Source: ESRI World Imagery



Topographic Map

Address: 845 Burloak Dr, ON

Source: ESRI World Topographic Map

Order Number: 23102300496

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 1	SW/0.0	109.8 / 0.27	BURLOAK DR + WYECROFT RD Oakville ON	WWIS

Well ID:	7350171	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Monitoring and Test Hole	**Date Received:**	12/24/2019
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z319961	**Contractor:**	7644
Tag:	A285664	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	

Municipality: OAKVILLE TOWN
Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/735\7350171.pdf

Additional Detail(s) (Map)

Well Completed Date: 11/27/2019
Year Completed: 2019
Depth (m): 6.096
Latitude: 43.3919638087055
Longitude: -79.7515789585419
Path: 735\7350171.pdf

Bore Hole Information

Bore Hole ID:	1007820364	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601108.00
Code OB Desc:		**North83:**	4805100.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	11/27/2019	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr

Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID:	1008230629
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.5
Formation End Depth:	4.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1008230630
Layer:	3
Color:	7
General Color:	RED
Mat1:	05
Most Common Material:	CLAY
Mat2:	17
Mat2 Desc:	SHALE
Mat3:	
Mat3 Desc:	
Formation Top Depth:	4.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1008230628
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	27
Most Common Material:	OTHER
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	0.5
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1008232836
Layer:	1
Plug From:	0.0
Plug To:	9.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008232837
Layer: 2
Plug From: 9.0
Plug To: 20.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008235867
Method Construction Code: B
Method Construction: Other Method
Other Method Construction: AUGER

Pipe Information

Pipe ID: 1008228599
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008236914
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: Inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008237848
Layer: 1
Slot: .01
Screen Top Depth: 10.0
Screen End Depth: 20.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch
Screen Diameter: 2.375

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008239049
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method: 0

Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1008234893
Diameter: 6.0
Depth From: 0.0
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: Inch

Links

Bore Hole ID:	1007820364	***Tag No:***	A285664
Depth M:	6.096	***Contractor:***	7644
Year Completed:	2019	***Latitude:***	43.3919638087055
Well Completed Dt:	11/27/2019	***Longitude:***	-79.7515789585419
Audit No:	Z319961	***Y:***	43.39196380645405
Path:	735\7350171.pdf	***X:***	-79.7515788101346

2	***1 of 16***	***ENE/0.0***	***109.6 / 0.03***	***2116160 ONTARIO INC O/A GAS STN 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON***	***FSTH***

License Issue Date: 3/23/2007
Tank Status: Licensed
Tank Status As Of: August 2007
Operation Type: Retail Fuel Outlet
Facility Type: Gasoline Station - Self Serve

--Details--
Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 35000
Tank Fuel Type: Liquid Fuel Double Wall UST - Diesel

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

2	***2 of 16***	***ENE/0.0***	***109.6 / 0.03***	***1491222 ONTARIO LTD O/A PETRO CANADA 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE ON L6L 6V9***	***FSTH***

License Issue Date: 3/3/2008 3:34:00 PM
Tank Status: Licensed
Tank Status As Of: December 2008
Operation Type: Retail Fuel Outlet
Facility Type: Gasoline Station - Self Serve

--Details--
Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 35000
Tank Fuel Type: Liquid Fuel Double Wall UST - Diesel

Status: Active
Year of Installation: 2004
Corrosion Protection:
Capacity: 50000
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

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2 | **3 of 16** | **ENE/0.0** | **109.6 / 0.03** | **845 Burloak Drive, Oakville ON L6L 6V9** | **EHS**

Order No: 20091109021
Status: C
Report Type: Standard Report
Report Date: 11/18/2009
Date Received: 11/9/2009
Previous Site Name:
Lot/Building Size:
Nearest Intersection: Wyecroft Road
Municipality: Halton
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.751395
Y: 43.392107
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Title Search; Aerial Photos; City Directory

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2 | **4 of 16** | **ENE/0.0** | **109.6 / 0.03** | **Petro-Canada, 845 Burloak Drive, Oakville ON L6L 6V9** | **CA**

Certificate #: 3654-627L2L
Application Year: 2004
Issue Date: 6/25/2004
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

2 **5 of 16** **ENE/0.0** **109.6 / 0.03** **Suncor Energy Inc.** **RSC**
845 Burloak Drive, Oakville Ontario L6L 6V9
ON L6L 6V9

RSC ID:	73111	**Cert Date:**	12-Jan-10
RA No:		**Cert Prop Use No:**	No CPU
RSC Type:		**Intended Prop Use:**	Commercial
Curr Property Use:	Commercial	**Qual Person Name:**	Boris J Jackman
Ministry District:	OAKVILLE	**Stratified (Y/N):**	
Filing Date:	30-May-11	**Audit (Y/N):**	
Date Ack:		**Entire Leg Prop. (Y/N):**	Yes
Date Returned:		**Accuracy Estimate:**	21 to 100 meters
Restoration Type:		**Telephone:**	905-8044655
Soil Type:		**Fax:**	905-8044600
Criteria:		**Email:**	bjackman@suncor.com
CPU Issued Sect 1686:	No		
Asmt Roll No:			
Prop ID No (PIN):	24858 - 0075 LT		
Property Municipal Address:	845 Burloak Drive, Oakville Ontario L6L 6V9		
Mailing Address:	2489 North Sheridan Way, Mississauga, Ontario. , L5K 1A8		
Latitude & Latitude:	43.39164010N 79.74996810W (converted from UTM)		
UTM Coordinates:	NAD83 17-601239-4805066		
Consultant:			
Legal Desc:	PT LT 35, CON 3 TRAF SDS, DESIGNATED AS PT 2, 20R12946; OAKVILLE		
Measurement Method:	Digitized from a satellite image		
Applicable Standards:	Full Depth Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use		
RSC PDF:			

2 **6 of 16** **ENE/0.0** **109.6 / 0.03** **845 Burloak Dr** **EHS**
Oakville ON L6L 6V9

Order No:	20130318039	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	RSC Premium Package (Urban)	**Client Prov/State:**	ON
Report Date:	27-MAR-13	**Search Radius (km):**	.3
Date Received:	18-MAR-13	**X:**	0
Previous Site Name:		**Y:**	0
Lot/Building Size:			
Additional Info Ordered:			

2 **7 of 16** **ENE/0.0** **109.6 / 0.03** **SUNCOR ENERGY PRODUCTS PARTNERSHIP** **FST**
845 BURLOAK @ SOUTH SERVICE RD
OAKVILLE L6M 4J7 ON CA
ON

Instance No:	28542530	**Manufacturer:**	
Status:		**Serial No:**	
Cont Name:		**Ulc Standard:**	
Instance Type:	FS Liquid Fuel Tank	**Quantity:**	
Item:		**Unit of Measure:**	
Item Description:	FS Liquid Fuel Tank	**Fuel Type:**	Gasoline
Tank Type:	Double Wall UST	**Fuel Type2:**	NULL
Install Date:	6/25/2009	**Fuel Type3:**	NULL
Install Year:	2004	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	
Description:		**Piping Underground:**	
Capacity:	50000	**No Underground:**	

Tank Material:	Fiberglass (FRP)	**Panam Related:**	
Corrosion Protect:	Fiberglass	**Panam Venue:**	
Overfill Protect:			

Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: SUNCOR ENERGY PRODUCTS PARTNERSHIP
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
2	8 of 16	ENE/0.0	109.6 / 0.03	SUNCOR ENERGY PRODUCTS PARTNERSHIP 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	FST

Instance No:	28542531	**Manufacturer:**	
Status:		**Serial No:**	
Cont Name:		**Ulc Standard:**	
Instance Type:	FS Liquid Fuel Tank	**Quantity:**	
Item:		**Unit of Measure:**	
Item Description:	FS Liquid Fuel Tank	**Fuel Type:**	Gasoline
Tank Type:	Double Wall UST	**Fuel Type2:**	NULL
Install Date:	6/25/2009	**Fuel Type3:**	NULL
Install Year:	2004	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	
Description:		**Piping Underground:**	
Capacity:	50000	**No Underground:**	
Tank Material:	Fiberglass (FRP)	**Panam Related:**	
Corrosion Protect:	Fiberglass	**Panam Venue:**	
Overfill Protect:			

Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: SUNCOR ENERGY PRODUCTS PARTNERSHIP
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
2	9 of 16	ENE/0.0	109.6 / 0.03	SUNCOR ENERGY PRODUCTS PARTNERSHIP 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA ON	FST

Instance No:	28542533	**Manufacturer:**	
Status:		**Serial No:**	
Cont Name:		**Ulc Standard:**	
Instance Type:	FS Liquid Fuel Tank	**Quantity:**	
Item:		**Unit of Measure:**	
Item Description:	FS Liquid Fuel Tank	**Fuel Type:**	Gasoline
Tank Type:	Double Wall UST	**Fuel Type2:**	NULL
Install Date:	6/25/2009	**Fuel Type3:**	NULL
Install Year:	2004	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Description:
Capacity: 50000
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: SUNCOR ENERGY PRODUCTS PARTNERSHIP
Item: FS LIQUID FUEL TANK

2	10 of 16	ENE/0.0	109.6 / 0.03	**SUNCOR ENERGY PRODUCTS PARTNERSHIP** **845 BURLOAK @ SOUTH SERVICE RD** **OAKVILLE L6M 4J7 ON CA** **ON**	FST

Instance No: 28542532
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 6/25/2009
Install Year: 2004
Years in Service:
Model: NULL
Description:
Capacity: 35000
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Diesel
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6M 4J7 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: SUNCOR ENERGY PRODUCTS PARTNERSHIP
Item: FS LIQUID FUEL TANK

2	11 of 16	ENE/0.0	109.6 / 0.03	**Petro-Canada** **845 Burloak Dr** **Oakville ON L6L 6N5**	ECA

Approval No: 3654-627L2L
Approval Date: 2004-06-25
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Petro-Canada
Address: 845 Burloak Dr
MOE District: Halton-Peel
City:
Longitude: -79.74943
Latitude: 43.390182
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0677-5XZT7K-14.pdf
PDF Site Location:

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2 | 12 of 16 | ENE/0.0 | 109.6 / 0.03 | **Metrolinx Capital Projects Group**
845 Burloak Drive
Burlington ON L6L 0C6 | GEN

Generator No: ON2644163
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 221 L
Waste Class Name: Light fuels

Waste Class: 221 U
Waste Class Name: Light fuels

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

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2 | 13 of 16 | ENE/0.0 | 109.6 / 0.03 | **845 Burloak Drive**
Oakville ON L6M 4J7 | EHS

Order No: 20190129120
Status: C
Report Type: Custom Report
Report Date: 05-FEB-19
Date Received: 29-JAN-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.749689
Y: 43.39228

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2 | 14 of 16 | ENE/0.0 | 109.6 / 0.03 | **845 BURLOAK DR**
OAKVILLE ON L6M 4J7 | DTNK

Delisted Fuel Storage Tank

Instance No: 28416175
Status: Active
Instance Type:
Fuel Type:
Cont Name:
Capacity:
Tank Material:
Corrosion Prot:
Tank Type:
Creation Date:
Overfill Prot Type:
Facility Location:
Piping SW Steel: 0
Piping SW Galvan: 0
Tanks SW Steel: 0
Piping Underground: 4
No Underground: 4
Max Hazard Rank:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Install Year:		**Max Hazard Rank 1:**	
Facility Type:		**Nxt Period Start Dt:**	
Device Installed Loc:		**Program Area 1:**	
Fuel Type 2:		**Program Area 2:**	
Fuel Type 3:		**Nxt Period Strt Dt 2:**	
Item:	FS GASOLINE STATION - SELF SERVE	**Risk Based Periodic:**	
Item Description:		**Vol of Directives:**	
Model:		**Years in Service:**	
Description:		**Created Date:**	
Instance Creation Dt:		**Federal Device:**	
Instance Install Dt:		**Periodic Exempt:**	
Manufacturer:		**Statutory Interval:**	
Serial No:		**Rcomnd Insp Interval:**	
ULC Standard:		**Recommended Toler:**	
Quantity:		**Panam Venue Name:**	
Unit of Measure:		**External Identifier:**	
Parent Fac Type:			
TSSA Base Sched Cycle 1:			
TSSA Base Sched Cycle 2:			
Original Source:	FST		
Record Date:	31-MAY-2021		

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2 | ***15 of 16*** | ***ENE/0.0*** | ***109.6 / 0.03*** | ***845 Burloak Dr Oakville ON L6M 4J7*** | ***EHS***

Order No:	20200211297	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	20-FEB-20	**Search Radius (km):**	.25
Date Received:	11-FEB-20	**X:**	-79.74972374
Previous Site Name:		**Y:**	43.39226219
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; Topographic Maps; City Directory; Aerial Photos		

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2 | ***16 of 16*** | ***ENE/0.0*** | ***109.6 / 0.03*** | ***845 Burloak Dr Oakville ON L6M 4J7*** | ***EHS***

Order No:	20200211297	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	20-FEB-20	**Search Radius (km):**	.25
Date Received:	11-FEB-20	**X:**	-79.74972374
Previous Site Name:		**Y:**	43.39226219
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; Topographic Maps; City Directory; Aerial Photos		

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3 | ***1 of 1*** | ***SSE/7.5*** | ***108.8 / -0.79*** | ***lot 35 con 3 ON*** | ***WWIS***

Well ID:	7383889	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	03/25/2021
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z354884	**Contractor:**	7644
Tag:	A312995	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	035

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008648489	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601135.00
Code OB Desc:		**North83:**	4805083.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	01/22/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008648489	**Tag No:**	A312995
Depth M:		**Contractor:**	7644
Year Completed:	2021	**Latitude:**	43.3918071296968
Well Completed Dt:	01/22/2021	**Longitude:**	-79.7512487991216
Audit No:	Z354884	**Y:**	43.39180712740879
Path:	738\7383889.pdf	**X:**	-79.75124864974184

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4 | ***1 of 7*** | ***W/21.6*** | ***109.9 / 0.31*** | ***NW Corner of Burlock Dr and Harvester Rd Burlington ON*** | ***EHS***

Order No:	20010913001	**Nearest Intersection:**	and Harvester
Status:	C	**Municipality:**	
Report Type:	Complete Report	**Client Prov/State:**	ON
Report Date:	9/21/01	**Search Radius (km):**	0.25
Date Received:	9/13/01	**X:**	-79.752439
Previous Site Name:		**Y:**	43.392144
Lot/Building Size:	122m B x 60m W		
Additional Info Ordered:			

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4 | ***2 of 7*** | ***W/21.6*** | ***109.9 / 0.31*** | ***BURLOAK DR AND WYECROFT DR Oakville ON*** | ***WWIS***

Well ID:	7145164	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Test Hole	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Test Hole	**Date Received:**	05/21/2010
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	M02636	**Contractor:**	7201
Tag:	A049043	**Form Version:**	5
Constructn Method:		**Owner:**	

Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1003309997	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	45020.00
Code OB Desc:		**North83:**	4020558.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:	This is a record from cluster log sheet	**UTMRC:**	9
Date Completed:	12/22/2009	**UTMRC Desc:**	unknown UTM
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Method of Construction & Well Use

Method Construction ID:	1003310000
Method Construction Code:	
Method Construction:	
Other Method Construction:	BORING

Pipe Information

Pipe ID:	1003310001
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003310003
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	20.0
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003310002
Layer:	
Slot:	

Screen Top Depth: 20.0
Screen End Depth: 20.0
Screen Material:
Screen Depth UOM: ft
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003310004
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003309999
Diameter: 4.0
Depth From:
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Bore Hole Information

Bore Hole ID: 1003309973
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 12/22/2009
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 79
East83: 45012.00
North83: 4323478.00
Org CS: UTM83
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: wwr

Method of Construction & Well Use

Method Construction ID: 1003309976
Method Construction Code:
Method Construction:
Other Method Construction: BORING

Pipe Information

Pipe ID:	1003309977
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003309979
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	20.0
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003309978
Layer:	
Slot:	
Screen Top Depth:	20.0
Screen End Depth:	20.0
Screen Material:	
Screen Depth UOM:	ft
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003309980
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1003309975
Diameter:	4.0
Depth From:	
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Bore Hole Information

Bore Hole ID:	1003309989	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	45014.00
Code OB Desc:		***North83:***	4323525.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	9
Date Completed:	12/22/2009	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Method of Construction & Well Use

Method Construction ID:	1003309992
Method Construction Code:	
Method Construction:	
Other Method Construction:	BORING

Pipe Information

Pipe ID:	1003309993
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003309995
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	20.0
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003309994
Layer:	
Slot:	
Screen Top Depth:	20.0
Screen End Depth:	20.0
Screen Material:	
Screen Depth UOM:	ft
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003309996

Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003309991
Diameter: 4.0
Depth From:
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Bore Hole Information

Bore Hole ID: 1003309981
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 12/22/2009
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 45012.00
North83: 4320520.00
Org CS: UTM83
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: wwr

Method of Construction & Well Use

Method Construction ID: 1003309984
Method Construction Code:
Method Construction:
Other Method Construction: BORING

Pipe Information

Pipe ID: 1003309985
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003309987

Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 20.0
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1003309986
Layer:
Slot:
Screen Top Depth: 20.0
Screen End Depth: 20.0
Screen Material:
Screen Depth UOM: ft
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003309988
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003309983
Diameter: 4.0
Depth From:
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Bore Hole Information

Bore Hole ID: 1003310005
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 12/22/2009
Remarks:
Loc Method Desc: on Water Well Record

Elevation:
Elevrc:
Zone: 17
East83: 45055.00
North83: 40206502.00
Org CS: UTM83
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: wwr

Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Method of Construction & Well Use

Method Construction ID: 1003310008
Method Construction Code:
Method Construction:
Other Method Construction: BORING

Pipe Information

Pipe ID: 1003310009
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003310011
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 20.0
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1003310010
Layer:
Slot:
Screen Top Depth: 20.0
Screen End Depth: 20.0
Screen Material:
Screen Depth UOM: ft
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003310012
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:

Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003310007
Diameter: 4.0
Depth From:
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Bore Hole Information

Bore Hole ID: 1002984215
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole: No
Cluster Kind:
Date Completed: 12/22/2009
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone:
East83: 7945055.00
North83: 4320502.00
Org CS: UTM83
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1003310014
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 81
Mat2 Desc: SANDY
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 7.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003310017
Layer: 2
Plug From: 8.0
Plug To: 20.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003310016

Layer:	1
Plug From:	0.0
Plug To:	8.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1003310021
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID:	1003310013
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003310018
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	20.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003310019
Layer:	1
Slot:	
Screen Top Depth:	
Screen End Depth:	
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.0

Hole Diameter

Hole ID:	1003310015
Diameter:	4.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

4	3 of 7	W/21.6	109.9 / 0.31	**RRL Burloak Inc.** **Burloak Drive and Wyecroft Road** **Oakville ON**	CA

Certificate #:	8879-6JER9C
Application Year:	2005
Issue Date:	11/25/2005
Approval Type:	Municipal and Private Sewage Works

Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	4 of 7	W/21.6	109.9 / 0.31	Burloak Drive and Harvestor Road, Burlington Burlington ON	SPL

Ref No:	1541-A3JU6G	**Municipality No:**	
Year:		**Nature of Damage:**	
Incident Dt:	10/22/2015	**Discharger Report:**	
Dt MOE Arvl on Scn:		**Material Group:**	
MOE Reported Dt:	10/22/2015	**Health/Env Conseq:**	
Dt Document Closed:		**Agency Involved:**	
Site No:	NA		
Facility Name:			
MOE Response:	No		
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:	Intersection<UNOFFICIAL>		
Site Address:	Burloak Drive and Harvestor Road, Burlington		
Site Region:			
Site Municipality:	Burlington		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:	4805114		
Easting:	601056		
Incident Cause:			
Incident Event:			
Environment Impact:			
Nature of Impact:			
Contaminant Qty:	0 other - see incident description		
System Facility Address:			
Client Name:			
Client Type:			
Call Report Locatn Geodata:			
Contaminant Code:	n/a		
Contaminant Name:	MUD		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:			
Receiving Environment:			
Incident Reason:	Over Pressurized/Pressure Loss		
Incident Summary:	RV Anderson: frack out to storm sewer and Sheldon Creek		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:	Unknown / N/A		
SAC Action Class:	Watercourse Spills		
Source Type:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	5 of 7	W/21.6	109.9 / 0.31	RRL Burloak Inc. Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	ECA

Approval No: 7219-6JES8K
Approval Date: 2005-11-25
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-Municipal Drinking Water Systems
Project Type: Municipal Drinking Water Systems
Business Name: RRL Burloak Inc.
Address: Burloak Drive and Wyecroft Rd
Full Address:
Full PDF Link:
PDF Site Location:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	6 of 7	W/21.6	109.9 / 0.31	RRL Burloak Inc. Burloak Drive and Wyecroft Rd Oakville ON L6J 7W5	ECA

Approval No: 8879-6JER9C
Approval Date: 2005-11-25
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: RRL Burloak Inc.
Address: Burloak Drive and Wyecroft Rd
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6764-6JCT2K-14.pdf
PDF Site Location:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	7 of 7	W/21.6	109.9 / 0.31	First Response Environmental (2012) Inc. Hamilton Wyecroft Road & Burloak Drive Oakville, ON OAKVILLE ON	SPL

Ref No: 1-28G0ZI
Year:
Incident Dt: 10/27/2022 3:53:42 PM
Dt MOE Arvl on Scn:
MOE Reported Dt: 10/27/2022 3:53:42 PM
Dt Document Closed: 10/28/2022 8:03:19 AM
Site No:
Facility Name: First Response Environmental (2012) Inc. Hamilton
MOE Response: Desktop Response
Site County/District:
Site Geo Ref Meth:
Site District Office: Halton-Peel District Office
Nearest Watercourse:
Site Name:
Site Address: Wyecroft Road & Burloak Drive Oakville, ON
Site Region: REGIONAL MUNICIPALITY OF HALTON
Site Municipality: OAKVILLE
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Municipality No:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq: 0 No Impact
Agency Involved:

Northing:	
Easting:	
Incident Cause:	
Incident Event:	
Environment Impact:	1 Minor Impact
Nature of Impact:	
Contaminant Qty:	70 litre (L)
System Facility Address:	1650 UPPER OTTAWA ST, HAMILTON, ON L8W 3P2
Client Name:	OAKVILLE
Client Type:	Government, Municipal
Call Report Locatn Geodata:	"integration_ids": "PR00001192769"],"wkts": "POINT (-79.7295026000 43.4145434000)"],"creation_date":"2022-10-27"
Contaminant Code:	
Contaminant Name:	COOLANT (N.O.S.)
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	
Receiving Environment:	Land
Incident Reason:	
Incident Summary:	Town of Oakville: coolant spill from transit bus, impact to c/b_intersection of Wyecroft Road & Burloak Drive, Oakville
Activity Preceding Spill:	
Property 2nd Watershed:	029 | Lake Ontario
Property Tertiary Watershed:	029A | West Lake Ontario Shoreline
Sector Type:	
SAC Action Class:	
Source Type:	

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5 | ***1 of 2*** | ***W/21.7*** | ***109.9 / 0.31*** | ***Wyecroft Extension Oakville ON*** | ***EHS***

Order No:	20281800044	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	27-AUG-20	**Search Radius (km):**	.28
Date Received:	18-AUG-20	**X:**	-79.75213
Previous Site Name:		**Y:**	43.392156
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory; Aerial Photos		

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5 | ***2 of 2*** | ***W/21.7*** | ***109.9 / 0.31*** | ***Wyecroft Extension Oakville ON*** | ***EHS***

Order No:	20281800044	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	27-AUG-20	**Search Radius (km):**	.28
Date Received:	18-AUG-20	**X:**	-79.75213
Previous Site Name:		**Y:**	43.392156
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory; Aerial Photos		

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6 | ***1 of 1*** | ***ESE/34.2*** | ***108.8 / -0.74*** | ***. 677 Burloak Drive in Oakville lot 35 con 3 ON*** | ***WWIS***

Well ID:	7406504	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	12/22/2021

Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	OYBYNHL3	**Contractor:**	7360
Tag:	A326047	**Form Version:**	9
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	035
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008894806	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601185.00
Code OB Desc:		**North83:**	4805105.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	12/03/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1008894932
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	2.5
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1008894933
Layer:	2
Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	

Mat3:
Mat3 Desc:
Formation Top Depth: 2.5
Formation End Depth: 15.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895015
Layer: 1
Plug From:
Plug To:
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895037
Layer: 1
Plug From: 0.0
Plug To: 2.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008894884
Method Construction Code: E
Method Construction: Auger
Other Method Construction:

Pipe Information

Pipe ID: 1008894839
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008894961
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 4.0
Casing Diameter: 2.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008894976
Layer: 1
Slot: 0.1
Screen Top Depth: 4.0
Screen End Depth: 14.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch

Screen Diameter: 2.25

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008894840
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1008894995
Diameter: 6.0
Depth From: 0.0
Depth To: 14.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Links

Bore Hole ID: 1008894806
Depth M: 4.572
Year Completed: 2021
Well Completed Dt: 12/03/2021
Audit No: OYBYNHL3
Path: 740\7406504.pdf
Tag No: A326047
Contractor: 7360
Latitude: 43.3919984386958
Longitude: -79.7506275058893
Y: 43.3919984363517
X: -79.75062735710549

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7 ***1 of 1*** ***ESE/49.2*** ***108.4 / -1.14*** ***ON*** ***WWIS***

Well ID: 7212918
Construction Date:
Use 1st:
Use 2nd:
Final Well Status:
Water Type:
Casing Material:
Audit No: C20865
Tag: A141514
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Flowing (Y/N):
Flow Rate:
Data Entry Status: Yes
Data Src:
Date Received: 12/11/2013
Selected Flag: TRUE
Abandonment Rec:
Contractor: 6607
Form Version: 8
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 04/26/2013
Year Completed: 2013
Depth (m):
Latitude: 43.391915799128
Longitude: -79.7504810363773
Path:

Bore Hole Information

Bore Hole ID: 1004665810
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 04/26/2013
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 601197.00
North83: 4805096.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Links

Bore Hole ID: 1004665810
Depth M:
Year Completed: 2013
Well Completed Dt: 04/26/2013
Audit No: C20865
Path:

Tag No: A141514
Contractor: 6607
Latitude: 43.391915799128
Longitude: -79.7504810363773
Y: 43.39191579641081
X: -79.75048088685215

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8 ***1 of 1*** ***NW/54.4*** ***110.9 / 1.34*** ***Kelsey's Roadhouse<UNOFFICIAL>*** ***SPL***
3549 Wyecroft Rd
Oakville ON

Ref No: 3138-BENU29
Year:
Incident Dt: 8/2/2019
Dt MOE Arvl on Scn:
MOE Reported Dt: 8/2/2019
Dt Document Closed:
Site No: NA
Facility Name:
MOE Response: No
Site County/District: Regional Municipality of Halton
Site Geo Ref Meth:
Site District Office: Halton-Peel
Nearest Watercourse:
Site Name: Kelsey's<UNOFFICIAL>
Site Address: 3549 Wyecroft Rd
Site Region: Central
Site Municipality: Oakville

Municipality No:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq: 2 - Minor Environment
Agency Involved:

Site Lot:	
Site Conc:	
Site Geo Ref Accu:	
Site Map Datum:	
Northing:	4805133.43
Easting:	601064.57
Incident Cause:	
Incident Event:	Leak/Break
Environment Impact:	
Nature of Impact:	
Contaminant Qty:	0 L
System Facility Address:	
Client Name:	Kelsey's Roadhouse<UNOFFICIAL>
Client Type:	
Call Report Locatn Geodata:	
Contaminant Code:	14
Contaminant Name:	GREASE (N.O.S.)
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	n/a
Receiving Medium:	
Receiving Environment:	Land
Incident Reason:	Material Failure - Poor Design/Substandard Material
Incident Summary:	Kelsey's: Grease spill to road, possible catchbasin
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Miscellaneous Communal
SAC Action Class:	Land Spills
Source Type:	Container/Drum/Tote

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9 | ***1 of 6*** | ***SSW/72.7*** | ***109.8 / 0.30*** | ***LONG MANUFACTURING LTD.***
5530 HARVESTER RD
BURLINGTON ON L7L 5V4 | ***SCT***

Established:	1885
Plant Size (ft²):	28000
Employment:	28

--Details--

Description:	FABRICATED PLATE WORK (BOILER SHOPS)
SIC/NAICS Code:	3443
Description:	MOTOR VEHICLE PARTS AND ACCESSORIES
SIC/NAICS Code:	3714
Description:	Power Boiler and Heat Exchanger Manufacturing
SIC/NAICS Code:	332410
Description:	Automobile and Light-Duty Motor Vehicle Manufacturing
SIC/NAICS Code:	336110

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9 | ***2 of 6*** | ***SSW/72.7*** | ***109.8 / 0.30*** | ***5530 Harvester Rd***
Burlington ON L7L5V4 | ***EHS***

Order No:	20150424095	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	30-APR-15	**Search Radius (km):**	.25
Date Received:	24-APR-15	**X:**	-79.751888
Previous Site Name:		**Y:**	43.391301

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Lot/Building Size:					
Additional Info Ordered:					

9	3 of 6	SSW/72.7	109.8 / 0.30	OLG 5530 HARVESTER RD BURLINGTON ON L7L 5V4	GEN

Generator No:	ON4779897
SIC Code:	911240
SIC Description:	911240
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS

9	4 of 6	SSW/72.7	109.8 / 0.30	Ontario Lottery and Gaming 5530 Harvester Rd Burlington ON L7L 5V4	GEN

Generator No:	ON4034671
SIC Code:	493190
SIC Description:	OTHER WAREHOUSING AND STORAGE
Approval Years:	2014
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Mark Wiedener
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	905-333-3004 Ext.26
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES
Waste Class:	265
Waste Class Name:	GRAPHIC ART WASTES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES

9	5 of 6	SSW/72.7	109.8 / 0.30	5530 Harvester Road Burlington ON L7L 5V4	EHS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Order No:	20200814059			**Nearest Intersection:**	
Status:	C			**Municipality:**	
Report Type:	Standard Report			**Client Prov/State:**	ON
Report Date:	19-AUG-20			**Search Radius (km):**	.25
Date Received:	14-AUG-20			**X:**	-79.7519919
Previous Site Name:				**Y:**	43.3912548
Lot/Building Size:					
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans				

9	6 of 6	SSW/72.7	109.8 / 0.30	5530 Harvester Road Burlington ON L7L 5V4	EHS

Order No:	20200814059			**Nearest Intersection:**	
Status:	C			**Municipality:**	
Report Type:	Standard Report			**Client Prov/State:**	ON
Report Date:	19-AUG-20			**Search Radius (km):**	.25
Date Received:	14-AUG-20			**X:**	-79.7519919
Previous Site Name:				**Y:**	43.3912548
Lot/Building Size:					
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans				

10	1 of 1	N/75.0	110.1 / 0.59	ON	WWIS

Well ID:	7376613			**Flowing (Y/N):**	
Construction Date:				**Flow Rate:**	
Use 1st:				**Data Entry Status:**	Yes
Use 2nd:				**Data Src:**	
Final Well Status:				**Date Received:**	12/31/2020
Water Type:				**Selected Flag:**	TRUE
Casing Material:				**Abandonment Rec:**	
Audit No:	Z339876			**Contractor:**	7726
Tag:	A299154			**Form Version:**	7
Constructn Method:				**Owner:**	
Elevation (m):				**County:**	HALTON
Elevatn Reliabilty:				**Lot:**	
Depth to Bedrock:				**Concession:**	
Well Depth:				**Concession Name:**	
Overburden/Bedrock:				**Easting NAD83:**	
Pump Rate:				**Northing NAD83:**	
Static Water Level:				**Zone:**	
Clear/Cloudy:				**UTM Reliability:**	
Municipality:	OAKVILLE TOWN				
Site Info:					

Bore Hole Information

Bore Hole ID:	1008558470	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601129.00
Code OB Desc:		**North83:**	4805240.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:		**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			

Source Revision Comment:
Supplier Comment:

Links

Bore Hole ID:	1008558470	***Tag No:***	A299154
Depth M:		***Contractor:***	7726
Year Completed:		***Latitude:***	43.3932213040522
Well Completed Dt:		***Longitude:***	-79.7512938437682
Audit No:	Z339876	***Y:***	43.39322130192695
Path:		***X:***	-79.7512936947252

---

11 ***1 of 1*** ***SE/79.9*** ***107.8 / -1.79*** ***EllisDon Civil Ltd. LSW - Burloak***
677 Burloak Dr
Oakville ON L6L 6V9 ***GEN***

Generator No:	ON6079843
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	146 L
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	251 L
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	252 L
Waste Class Name:	WASTE OILS & LUBRICANTS

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12 ***1 of 1*** ***WSW/83.4*** ***109.8 / 0.30*** ***HARVESTER RD NEAR BURLOAK DR***
Burlington ON ***WWIS***

Well ID:	7351616	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Monitoring	***Data Entry Status:***	
Use 2nd:		***Data Src:***	
Final Well Status:	Observation Wells	***Date Received:***	01/14/2020
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z323877	***Contractor:***	7675
Tag:	A273284	***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 12/06/2019
Year Completed: 2019
Depth (m): 6.096
Latitude: 43.3916608513931
Longitude: -79.7526964284128
Path:

Bore Hole Information

Bore Hole ID: 1007897357
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 12/06/2019
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 601018.00
North83: 4805065.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1008181982
Layer: 1
Color:
General Color:
Mat1: 11
Most Common Material: GRAVEL
Mat2: 28
Mat2 Desc: SAND
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 5.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008181983
Layer: 2
Color: 7
General Color: RED
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3: 92
Mat3 Desc: WEATHERED
Formation Top Depth: 5.0

Formation End Depth: 20.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008182331
Layer: 1
Plug From: 0.0
Plug To: 8.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008182332
Layer: 2
Plug From: 8.0
Plug To: 20.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008182684
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 1008181722
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008182799
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: Inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008182948
Layer: 1
Slot: 10
Screen Top Depth: 10.0
Screen End Depth: 20.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1008183114
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	No

Water Details

Water ID:	1008182980
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	16.0
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1008182483
Diameter:	6.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	Inch

Links

Bore Hole ID:	1007897357	***Tag No:***	A273284
Depth M:	6.096	***Contractor:***	7675
Year Completed:	2019	***Latitude:***	43.3916608513931
Well Completed Dt:	12/06/2019	***Longitude:***	-79.7526964284128
Audit No:	Z323877	***Y:***	43.39166084882979
Path:		***X:***	-79.75269627898554

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	*1 of 2*	*E/86.2*	*107.5 / -2.09*	***677 burloak drive, oakville Oakville ON***	***EHS***

Order No:	23020900809	***Nearest Intersection:***	
Status:	C	***Municipality:***	
Report Type:	Custom Report	***Client Prov/State:***	ON
Report Date:	28-FEB-23	***Search Radius (km):***	.25
Date Received:	09-FEB-23	***X:***	-79.74983672
Previous Site Name:		***Y:***	43.39229902
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	*2 of 2*	*E/86.2*	*107.5 / -2.09*	***677 burloak drive, oakville Oakville ON***	***EHS***

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Order No:	23020900809	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	28-FEB-23	**Search Radius (km):**	.25
Date Received:	09-FEB-23	**X:**	-79.74983672
Previous Site Name:		**Y:**	43.39229902
Lot/Building Size:			
Additional Info Ordered:			

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14 | **1 of 1** | **N/92.1** | **111.0 / 1.43** | **3531 WYECROFT ROAD, OAKVILLE ON** | **INC**

Incident No:	1172142	**Any Health Impact:**	No
Incident ID:		**Any Enviro Impact:**	No
Instance No:		**Service Interrupted:**	No
Status Code:		**Was Prop Damaged:**	No
Attribute Category:	FS-Perform L1 Incident Insp	**Reside App. Type:**	
Context:		**Commer App. Type:**	
Date of Occurrence:	2013/08/21 00:00:00	**Indus App. Type:**	
Time of Occurrence:	12:00:00	**Institut App. Type:**	
Incident Created On:		**Venting Type:**	
Instance Creation Dt:		**Vent Conn Mater:**	
Instance Install Dt:		**Vent Chimney Mater:**	
Occur Insp Start Date:	2013/09/16 00:00:00	**Pipeline Type:**	
Approx Quant Rel:		**Pipeline Involved:**	
Tank Capacity:		**Pipe Material:**	
Fuels Occur Type:	Vapour Release	**Depth Ground Cover:**	
Fuel Type Involved:	Natural Gas	**Regulator Location:**	
Enforcement Policy:	NULL	**Regulator Type:**	
Prc Escalation Req:	NULL	**Operation Pressure:**	
Tank Material Type:		**Liquid Prop Make:**	
Tank Storage Type:		**Liquid Prop Model:**	
Tank Location Type:		**Liquid Prop Serial No:**	
Pump Flow Rate Cap:		**Liquid Prop Notes:**	
Task No:	4604972	**Equipment Type:**	
Notes:		**Equipment Model:**	
Drainage System:		**Serial No:**	
Sub Surface Contam.:		**Cylinder Capacity:**	
Aff Prop Use Water:		**Cylinder Cap Units:**	
Contam. Migrated:		**Cylinder Mat Type:**	
Contact Natural Env:		**Near Body of Water:**	
Incident Location:	3531 WYECROFT ROAD, OAKVILLE - VAPOUR RELEASE		
Occurence Narrative:	Meter Damage		
Operation Type Involved:	Private Dwelling		
Item:			
Item Description:			
Device Installed Location:			

---

15 | **1 of 2** | **E/94.7** | **107.3 / -2.29** | **677 Burloak Drive Oakville ON L6L 6V9** | **EHS**

Order No:	21111000396	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	15-NOV-21	**Search Radius (km):**	.15
Date Received:	10-NOV-21	**X:**	-79.74972975
Previous Site Name:		**Y:**	43.39228545
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	2 of 2	E/94.7	107.3 / -2.29	677 Burloak Drive Oakville ON L6L 6V9	EHS

Order No:	21111000396	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	15-NOV-21	**Search Radius (km):**	.15
Date Received:	10-NOV-21	**X:**	-79.74972975
Previous Site Name:		**Y:**	43.39228545
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
16	1 of 1	SSW/106.5	109.2 / -0.39	ON	WWIS

Well ID:	7270758	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	09/08/2016
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	C33238	**Contractor:**	7215
Tag:	A202962	**Form Version:**	8
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	04/07/2016
Year Completed:	2016
Depth (m):	
Latitude:	43.3909153868703
Longitude:	-79.7520449760575
Path:	

Bore Hole Information

Bore Hole ID:	1006234766	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601072.00
Code OB Desc:		**North83:**	4804983.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	04/07/2016	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			

Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Links

Bore Hole ID:	1006234766	***Tag No:***	A202962
Depth M:		***Contractor:***	7215
Year Completed:	2016	***Latitude:***	43.3909153868703
Well Completed Dt:	04/07/2016	***Longitude:***	-79.7520449760575
Audit No:	C33238	***Y:***	43.39091538459003
Path:		***X:***	-79.75204482730182

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17 ***1 of 10*** ***W/119.7*** ***112.1 / 2.55*** ***BURLOAK HARVESTER ESSO*** ***RST***
5539 HARVESTER RD
BURLINGTON ON L7L 7G4

Headcode: 1186800
Headcode Desc: Service Stations-Gasoline, Oil & Natural Gas
Phone: 9056812901
List Name:
Description:

---

17 ***2 of 10*** ***W/119.7*** ***112.1 / 2.55*** ***2074065 ONTARIO INC O/A GAS STN*** ***FSTH***
5539 HARVESTER RD
BURLINGTON ON L7L 7G4

License Issue Date: 4/3/2008 10:47:00 AM
Tank Status: Licensed
Tank Status As Of: December 2008
Operation Type: Retail Fuel Outlet
Facility Type: Gasoline Station - Self Serve

--Details--
Status: Active
Year of Installation: 2002
Corrosion Protection:
Capacity: 46400
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2002
Corrosion Protection:
Capacity: 46400
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

Status: Active
Year of Installation: 2002
Corrosion Protection:
Capacity: 46400
Tank Fuel Type: Liquid Fuel Double Wall UST - Gasoline

---

17 ***3 of 10*** ***W/119.7*** ***112.1 / 2.55*** ***Imperial Oil Limited*** ***CA***
5539 Harvester Rd
Burlington ON L7L 7G4

Certificate #: 8907-7NVM35
Application Year: 2009
Issue Date: 2/2/2009

Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

---

17 | ***4 of 10*** | ***W/119.7*** | ***112.1 / 2.55*** | ***MAC'S CONVENIENCE STORES INC 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON*** | ***FST***

Instance No: 13472691
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 8/28/2009 11:04:10 AM
Install Year: 2002
Years in Service:
Model: NULL
Description:
Capacity: 46400
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

---

17 | ***5 of 10*** | ***W/119.7*** | ***112.1 / 2.55*** | ***MAC'S CONVENIENCE STORES INC 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON*** | ***FST***

Instance No: 13472690
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 8/28/2009 11:03:51 AM
Install Year: 2002
Years in Service:
Model: NULL
Description:
Capacity: 46400
Tank Material: Fiberglass (FRP)

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:

Corrosion Protect: Fiberglass
Panam Venue:
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	6 of 10	W/119.7	112.1 / 2.55	MAC'S CONVENIENCE STORES INC 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	FST

Instance No: 64470870
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 8/28/2009 11:05:20 AM
Install Year: 2002
Years in Service:
Model: NULL
Description:
Capacity: 22750
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Diesel
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	7 of 10	W/119.7	112.1 / 2.55	MAC'S CONVENIENCE STORES INC 5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA ON	FST

Instance No: 13472689
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 8/28/2009 11:03:21 AM
Install Year: 2002
Years in Service:
Model: NULL
Description:
Capacity: 46400

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:

Tank Material:	Fiberglass (FRP)	**Panam Related:**	
Corrosion Protect:	Fiberglass	**Panam Venue:**	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:	FS Gasoline Station - Self Serve		
Facility Location:			
Device Installed Location:	5539 HARVESTER RD BURLINGTON L7L 5N5 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	MAC'S CONVENIENCE STORES INC
Item:	FS LIQUID FUEL TANK

---

17 | ***8 of 10*** | ***W/119.7*** | ***112.1 / 2.55*** | ***5539 Harvester Road Burlington ON L7L7G4*** | ***EHS***

Order No:	20150428102	**Nearest Intersection:**	
Status:	C	**Municipality:**	Burlington
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	05-MAY-15	**Search Radius (km):**	.25
Date Received:	28-APR-15	**X:**	-79.753285
Previous Site Name:		**Y:**	43.392054
Lot/Building Size:			
Additional Info Ordered:	City Directory		

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17 | ***9 of 10*** | ***W/119.7*** | ***112.1 / 2.55*** | ***Imperial Oil Limited 5539 Harvester Rd Burlington ON M3C 1K5*** | ***ECA***

Approval No:	8907-7NVM35	**MOE District:**	Halton-Peel
Approval Date:	2009-02-02	**City:**	
Status:	Approved	**Longitude:**	-79.753296
Record Type:	ECA	**Latitude:**	43.392216
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Halton	**Geometry Y:**	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Imperial Oil Limited		
Address:	5539 Harvester Rd		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/8175-7MTNEV-14.pdf		
PDF Site Location:			

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17 | ***10 of 10*** | ***W/119.7*** | ***112.1 / 2.55*** | ***5539 HARVESTER RD BURLINGTON ON L7L 5N5*** | ***DTNK***

Delisted Fuel Storage Tank

Instance No:	13414273	**Creation Date:**	
Status:	Active	**Overfill Prot Type:**	
Instance Type:		**Facility Location:**	
Fuel Type:		**Piping SW Steel:**	0
Cont Name:		**Piping SW Galvan:**	0
Capacity:		**Tanks SW Steel:**	0
Tank Material:		**Piping Underground:**	4
Corrosion Prot:		**No Underground:**	4
Tank Type:		**Max Hazard Rank:**	
Install Year:		**Max Hazard Rank 1:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Facility Type:		**Nxt Period Start Dt:**	
Device Installed Loc:		**Program Area 1:**	
Fuel Type 2:		**Program Area 2:**	
Fuel Type 3:		**Nxt Period Strt Dt 2:**	
Item:	FS GASOLINE STATION - SELF SERVE	**Risk Based Periodic:**	
Item Description:		**Vol of Directives:**	
Model:		**Years in Service:**	
Description:		**Created Date:**	
Instance Creation Dt:		**Federal Device:**	
Instance Install Dt:		**Periodic Exempt:**	
Manufacturer:		**Statutory Interval:**	
Serial No:		**Rcomnd Insp Interval:**	
ULC Standard:		**Recommended Toler:**	
Quantity:		**Panam Venue Name:**	
Unit of Measure:		**External Identifier:**	
Parent Fac Type:			
TSSA Base Sched Cycle 1:			
TSSA Base Sched Cycle 2:			
Original Source:	FST		
Record Date:	31-MAY-2021		

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18 | **1 of 1** | **ESE/126.2** | **107.4 / -2.17** | **. 677 Burloak Drive in Oakville lot 35 con 3 ON** | **WWIS**

Well ID:	7406506	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	12/22/2021
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	ANAQNUB8	**Contractor:**	7360
Tag:	A326049	**Form Version:**	9
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	035
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008894812	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601255.00
Code OB Desc:		**North83:**	4805045.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	12/03/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1008894937
Layer:	2
Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	2.5
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1008894936
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	2.5
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1008895017
Layer:	1
Plug From:	
Plug To:	
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1008895039
Layer:	1
Plug From:	1.0
Plug To:	8.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1008894886
Method Construction Code:	E
Method Construction:	Auger
Other Method Construction:	

Pipe Information

Pipe ID: 1008894843
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008894963
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008894978
Layer: 1
Slot: 0.1
Screen Top Depth: 10.0
Screen End Depth: 20.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch
Screen Diameter: 2.25

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008894844
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1008894997
Diameter: 6.0
Depth From: 0.0
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Links

Bore Hole ID: 1008894812 ***Tag No:*** A326049

Depth M:	6.096	**Contractor:**	7360
Year Completed:	2021	**Latitude:**	43.3914488545239
Well Completed Dt:	12/03/2021	**Longitude:**	-79.7497744941077
Audit No:	ANAQNUB8	**Y:**	43.391448852554696
Path:	740\7406506.pdf	**X:**	-79.74977434507842

19 **1 of 6** **SW/129.8** **109.8 / 0.30** **FISHER SERVICE COMPANY 15-337**
5510 HARVESTER ROAD
BURLINGTON ON L7L 5V4 **GEN**

Generator No:	ON0204901
SIC Code:	3911
SIC Description:	INDICAT., ETC. INST.
Approval Years:	92,93,94,95,96,97
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	253
Waste Class Name:	EMULSIFIED OILS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES

19 **2 of 6** **SW/129.8** **109.8 / 0.30** **FISHER SERVICE COMPANY**
5510 HARVESTER ROAD
BURLINGTON ON L7L 5V4 **GEN**

Generator No:	ON0204901
SIC Code:	3911
SIC Description:	INDICAT., ETC. INST.
Approval Years:	98
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	

Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

19	*3 of 6*	*SW/129.8*	*109.8 / 0.30*	***FISHER SERV(OUT OF BUSINESS)*** ***5510 HARVESTER ROAD*** ***BURLINGTON ON L7L 5V4***	***GEN***

Generator No: ON0204901
SIC Code: 3911
SIC Description: INDICAT., ETC. INST.
Approval Years: 99,00
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

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19 | 4 of 6 | SW/129.8 | 109.8 / 0.30 | **5510 Harvester Rd**
Burlington ON L7L5V4 | EHS

Order No: 20160323099
Status: C
Report Type: Standard Report
Report Date: 28-MAR-16
Date Received: 23-MAR-16
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: City Directory; Aerial Photos

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.752415
Y: 43.390843

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19 | 5 of 6 | SW/129.8 | 109.8 / 0.30 | **GEARS BIKE & SKI SHOPS LIMITED**
5510 HARVESTER ROAD
BURLINGTON ON L7L5V4 | GEN

Generator No: ON8021636
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

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19 | 6 of 6 | SW/129.8 | 109.8 / 0.30 | **GEARS BIKE & SKI SHOPS LIMITED**
5510 HARVESTER ROAD
BURLINGTON ON L7L5V4 | GEN

Generator No: ON8021636
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: OIL SKIMMINGS & SLUDGES

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20 *1 of 2* *SW/129.8* *109.8 / 0.30* ***5510 Harvester Road Burlington ON L7L 5V4*** ***EHS***

Order No: 20191111128
Status: C
Report Type: Standard Report
Report Date: 14-NOV-19
Date Received: 11-NOV-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.752415
Y: 43.390843

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20 *2 of 2* *SW/129.8* *109.8 / 0.30* ***5510 Harvester Road Burlington ON L7L 5V4*** ***EHS***

Order No: 20191111128
Status: C
Report Type: Standard Report
Report Date: 14-NOV-19
Date Received: 11-NOV-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.752415
Y: 43.390843

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21 *1 of 1* *SE/133.2* *107.5 / -2.00* ***lot 35 con 3 ON*** ***WWIS***

Well ID: 7383886
Construction Date:
Use 1st:
Use 2nd:
Final Well Status:
Water Type:
Casing Material:
Audit No: Z354885
Tag: A312994
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info:

Flowing (Y/N):
Flow Rate:
Data Entry Status: Yes
Data Src:
Date Received: 03/25/2021
Selected Flag: TRUE
Abandonment Rec:
Contractor: 7644
Form Version: 7
Owner:
County: HALTON
Lot: 035
Concession: 03
Concession Name: DS S
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 1008648480
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:

Elevation:
Elevrc:
Zone: 17
East83: 601221.00
North83: 4804989.00
Org CS: UTM83
UTMRC: 4

Date Completed:	01/22/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008648480	**Tag No:**	A312994
Depth M:		**Contractor:**	7644
Year Completed:	2021	**Latitude:**	43.390949312413
Well Completed Dt:	01/22/2021	**Longitude:**	-79.7502045646547
Audit No:	Z354885	**Y:**	43.390949309378904
Path:	738\7383886.pdf	**X:**	-79.75020441612287

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22 | **1 of 1** | **NW/135.3** | **113.0 / 3.45** | **3543 Wyecroft Road W UTM Zone: 17 Easting: 601366 Northing: 4805579 Oakville ON** | **SPL**

Ref No:	3653-A7DSM5	**Municipality No:**	
Year:		**Nature of Damage:**	
Incident Dt:	2016/02/22	**Discharger Report:**	
Dt MOE Arvl on Scn:		**Material Group:**	
MOE Reported Dt:	2016/02/22	**Health/Env Conseq:**	
Dt Document Closed:		**Agency Involved:**	
Site No:	NA		
Facility Name:			
MOE Response:	No		
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:	Canadian RioCan Centre<UNOFFICIAL>		
Site Address:	3543 Wyecroft Road W UTM Zone: 17 Easting: 601366 Northing: 4805579		
Site Region:			
Site Municipality:	Oakville		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:			
Easting:			
Incident Cause:			
Incident Event:	Unknown / N/A		
Environment Impact:			
Nature of Impact:			
Contaminant Qty:	0 other - see incident description		
System Facility Address:			
Client Name:			
Client Type:			
Call Report Locatn Geodata:			
Contaminant Code:	13		
Contaminant Name:	MINERAL OIL		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:			
Receiving Environment:	Land; Source Water Zone		
Incident Reason:	Unknown / N/A		
Incident Summary:	Oakville Hydro: Transformer leak, mineral oil 10L		

Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Unknown / N/A
SAC Action Class: Land Spills
Source Type:

---

23 | ***1 of 1*** | ***WNW/158.4*** | ***113.8 / 4.27*** | ***926 BURLOAK DR Burlington ON*** | ***WWIS***

Well ID:	7246268	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:		***Data Entry Status:***	
Use 2nd:		***Data Src:***	
Final Well Status:	Abandoned-Other	***Date Received:***	08/10/2015
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z214746	***Contractor:***	7472
Tag:		***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	
Latitude:	43.392761036734
Longitude:	-79.7536740056753
Path:	

Bore Hole Information

Bore Hole ID:	1005550166	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	600937.00
Code OB Desc:		***North83:***	4805186.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	07/16/2015	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Method of Construction & Well Use

Method Construction ID: 1005684632
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 1005684625
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1005684630
Layer:
Material:
Open Hole or Material:
Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684631
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID: 1005684629
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005684627
Diameter: 21.0
Depth From: 0.0
Depth To: 2.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Hole Diameter

Hole ID: 1005684628
Diameter: 5.199999809265137

Depth From:	2.0
Depth To:	6.099999904632568
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	1005550166	**Tag No:**	
Depth M:		**Contractor:**	7472
Year Completed:	2015	**Latitude:**	43.392761036734
Well Completed Dt:	07/16/2015	**Longitude:**	-79.7536740056753
Audit No:	Z214746	**Y:**	43.39276103437001
Path:	724\7246268.pdf	**X:**	-79.75367385671201

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24 | **1 of 1** | **WNW/160.4** | **113.9 / 4.39** | **926 BURLOAK DR Burlington ON** | **WWIS**

Well ID:	7246269	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Abandoned-Other	**Date Received:**	08/10/2015
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z214745	**Contractor:**	7472
Tag:		**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	5.8
Latitude:	43.3928060484131
Longitude:	-79.7536730831405
Path:	

Bore Hole Information

Bore Hole ID:	1005550177	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600937.00
Code OB Desc:		**North83:**	4805191.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	07/16/2015	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			

Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 1005684634
Layer: 1
Color:
General Color:
Mat1:
Most Common Material:
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 5.800000190734863
Formation End Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1005684640
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 1005684633
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1005684638
Layer:
Material:
Open Hole or Material:
Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684639
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID:	1005684637
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	m

Hole Diameter

Hole ID:	1005684635
Diameter:	21.0
Depth From:	0.0
Depth To:	2.0
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Hole Diameter

Hole ID:	1005684636
Diameter:	5.199999809265137
Depth From:	2.0
Depth To:	5.800000190734863
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	1005550177	***Tag No:***	
Depth M:	5.8	***Contractor:***	7472
Year Completed:	2015	***Latitude:***	43.3928060484131
Well Completed Dt:	07/16/2015	***Longitude:***	-79.7536730831405
Audit No:	Z214745	***Y:***	43.39280604551797
Path:	724\7246269.pdf	***X:***	-79.75367293413855

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25 ***1 of 34*** ***S/166.1*** ***107.9 / -1.67*** ***TWINPAK INC.***
835 SYSCON COURT
BURLINGTON CITY ON L7L 6C5 ***CA***

Certificate #:	8-3341-91-
Application Year:	91
Issue Date:	5/5/1992
Approval Type:	Industrial air
Status:	Approved in 1992
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	INSTALL PLASTICS MFG./HEATING EQUIPMENT
Contaminants:	Nitrogen Oxides, Methyl Chloroform
Emission Control:	No Controls

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25 ***2 of 34*** ***S/166.1*** ***107.9 / -1.67*** ***BERICAP INC.***
835 SYSCON CRT
BURLINGTON ON L7L 6C5 ***SCT***

Established:	1950
Plant Size (ft²):	72000

Employment: 53

--Details--
Description: PLASTICS PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC/NAICS Code: 3089

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25 ***3 of 34*** ***S/166.1*** ***107.9 / -1.67*** ***TRIMAC TRANSPORTATION SERVICES***
835 SYSCON COURT TRANSPORT TRUCK (CARGO)
BURLINGTON CITY ON L7L 6C5 ***SPL***

Ref No: 123415
Year:
Incident Dt: 2/6/1996
Dt MOE Arvl on Scn:
MOE Reported Dt: 2/7/1996
Dt Document Closed:
Site No:
Facility Name:
MOE Response:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:
Site Region:
Site Municipality: BURLINGTON CITY
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause: PIPE/HOSE LEAK
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact: Water course or lake
Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: OTHER
Incident Summary: TRIMAC TRANSPORTATION- 60 L DIESEL FUEL TO LAND AND TO C/B.
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

Municipality No: 14101
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:

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25 ***4 of 34*** ***S/166.1*** ***107.9 / -1.67*** ***TWINPAK INC***
835 SYSCON RD ***SCT***

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				BURLINGTON ON L7L 6C5	

Established: 1950
Plant Size (ft²): 72000
Employment: 53

--Details--
Description: PLASTICS PRODUCTS, N.E.C.
SIC/NAICS Code: 3089

25	5 of 34	S/166.1	107.9 / -1.67	BERICAP CANADA INC. 835 SYSCON CRT BURLINGTON ON L7L 6C5	SCT

Established: 1987
Plant Size (ft²): 0
Employment: 3

--Details--
Description: PLASTICS PRODUCTS, N.E.C.
SIC/NAICS Code: 3089

Description: METAL CANS
SIC/NAICS Code: 3411

25	6 of 34	S/166.1	107.9 / -1.67	Bericap North America Inc. 835 Syscon Crt Burlington ON L7L 6C5	SCT

Established: 01-JUL-81
Plant Size (ft²): 110000
Employment:

--Details--
Description: All Other Plastic Product Manufacturing
SIC/NAICS Code: 326198

Description: All Other Plastic Product Manufacturing
SIC/NAICS Code: 326198

25	7 of 34	S/166.1	107.9 / -1.67	TWINPAK INC. 835 SYSCON COURT BURLINGTON ON L7L 6C5	GEN

Generator No: ON0230702
SIC Code: 1699
SIC Description: OTHER PLASTIC PROD.
Approval Years: 92,93,97
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

25	8 of 34	S/166.1	107.9 / -1.67	***TWINPAK INC. 37-814*** ***835 SYSCON COURT BURLINGTON*** ***BURLINGTON ON L7L 6C5***	GEN

Generator No: ON0230702
SIC Code: 1699
SIC Description: OTHER PLASTIC PROD.
Approval Years: 94,96
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

25	9 of 34	S/166.1	107.9 / -1.67	***TWINPAK INC. 37-814*** ***835 SYSCON COURT BURLINGTON C/O 1840*** ***TRANS-CANADA HIGHWAY*** ***BURLINGTON ON L7L 6C5***	GEN

Generator No: ON0230702
SIC Code: 1699
SIC Description: OTHER PLASTIC PROD.
Approval Years: 95
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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25 | ***10 of 34*** | ***S/166.1*** | ***107.9 / -1.67*** | ***TWIN(SEE & USE ON2275500)*** ***835 SYSCON COURT*** ***BURLINGTON ON L7L 6C5*** | ***GEN***

Generator No: ON0230702
SIC Code: 1699
SIC Description: OTHER PLASTIC PROD.
Approval Years: 98
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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25 | ***11 of 34*** | ***S/166.1*** | ***107.9 / -1.67*** | ***BERICAP INC.*** ***835 SYSCON COURT*** ***BURLINGTON ON L7L 6C5*** | ***GEN***

Generator No: ON2275500
SIC Code: 1699
SIC Description: OTHER PLASTIC PROD.
Approval Years: 97,98,99,00,01,02,03,04,05,06,07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

25	*12 of 34*	*S/166.1*	*107.9 / -1.67*	***Bericap Inc.*** ***835 Syscon Court Burlington Ontario L7L 6C5*** ***Burlington*** ***ON***	***EBR***

EBR Registry No: IA03E1856
Ministry Ref No: 8412-5TUMBZ
Notice Type: Instrument Decision
Notice Stage:
Notice Date: April 25, 2005
Proposal Date: December 19, 2003
Year: 2003
Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Off Instrument Name:
Posted By:
Company Name: Bericap Inc.
Site Address:
Location Other:
Proponent Name:
Proponent Address: 835 Syscon Court, Burlington Ontario, L7L 6C5
Comment Period:
URL:

Site Location Details:

835 Syscon Court Burlington Ontario L7L 6C5 Burlington

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
25	13 of 34	S/166.1	107.9 / -1.67	Bericap Inc. 835 Syscon Court Burlington ON L7L 6C5	CA

Certificate #: 1136-5ZCNBU
Application Year: 2005
Issue Date: 4/24/2005
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
25	14 of 34	S/166.1	107.9 / -1.67	BERICAP INC. 835 SYSCON COURT BURLINGTON ON L7L 6C5	GEN

Generator No: ON2275500
SIC Code: 326198
SIC Description: All Other Plastic Product Manufacturing
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

25	15 of 34	S/166.1	107.9 / -1.67	**BERICAP INC.** **835 SYSCON COURT** **BURLINGTON ON L7L 6C5**	GEN

Generator No: ON2275500
SIC Code: 326198
SIC Description: All Other Plastic Product Manufacturing
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

25	16 of 34	S/166.1	107.9 / -1.67	**BERICAP INC.** **835 SYSCON COURT** **BURLINGTON ON L7L 6C5**	GEN

Generator No:	ON2275500
SIC Code:	326198
SIC Description:	All Other Plastic Product Manufacturing
Approval Years:	2011
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	121
Waste Class Name:	ALKALINE WASTES - HEAVY METALS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	253
Waste Class Name:	EMULSIFIED OILS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
25	17 of 34	S/166.1	107.9 / -1.67	***BERICAP INC.*** ***835 SYSCON COURT*** ***BURLINGTON ON L7L 6C5***	***GEN***

Generator No:	ON2275500
SIC Code:	326198
SIC Description:	All Other Plastic Product Manufacturing
Approval Years:	2012
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

25	18 of 34	S/166.1	107.9 / -1.67	**Bericap Inc.** **835 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON** **ON**	EBR

EBR Registry No: 012-1033
Ministry Ref No: 6820-9FBLQU
Notice Type: Instrument Decision
Notice Stage:
Notice Date: April 10, 2017
Proposal Date: February 07, 2014
Year: 2014
Instrument Type: (EPA Part II.1-air) - Environmental Compliance Approval (project type: air)
Off Instrument Name:
Posted By:
Company Name: Bericap Inc.
Site Address:
Location Other:
Proponent Name:
Proponent Address: 835 Syscon Court, Burlington Ontario, Canada L7L 6C5
Comment Period:
URL:

Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Site Location Details:

835 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
25	19 of 34	S/166.1	107.9 / -1.67	BERICAP NORTH AMERICA INC. 835 SYSCON CRT BURLINGTON ON L7L6C5	NPRI

NPRI ID:	8800000363	**Org ID:**	
Other ID:		**Submit Date:**	
No Other ID:		**Last Modified:**	
Track ID:		**Contact ID:**	
Report ID:		**Cont Type:**	MED
Report Type:		**Contact Title:**	Mr.
Rpt Type ID:		**Cont First Name:**	ENVER
Report Year:	2004	**Cont Last Name:**	BELLISAN
Not-Current Rpt?:		**Contact Position:**	FACILITIES MANAGER
Yr of Last Filed Rpt:		**Contact Fax:**	
Fac ID:		**Contact Ph.:**	
Fac Name:	BURLINGTON FACILITY	**Cont Area Code:**	905
Fac Address1:		**Contact Tel.:**	6342248
Fac Address2:		**Contact Ext.:**	334
Fac Postal Zip:		**Cont Fax Area Cde:**	905
Facility Lat:		**Contact Fax:**	6347780
Facility Long:		**Contact Email:**	ebellisan@bericap.com
DLS (Last Filed Rpt):		**Latitude:**	
Facility DLS:		**Longitude:**	
Datum:		**UTM Zone:**	
Facility Cmnts:		**UTM Northing:**	
URL:		**UTM Easting:**	
No of Empl.:	133	**Waste Streams:**	
Parent Co.:		**No Streams:**	
No Parent Co.:		**Waste Off Sites:**	
Pollut Prev Cmnts:		**No Off Sites:**	
Stacks:		**Shutdown:**	
No of Stacks:		**No of Shutdown:**	
Canadian SIC Code (2 digit):			
Canadian SIC Code:			
SIC Code Description:			
American SIC Code:			
NAICS Code (2 digit):	31-33		
NAICS 2 Description:	Manufacturing		
NAICS Code (4 digit):	3261		
NAICS 4 Description:	Plastic Product Manufacturing		
NAICS Code (6 digit):	326198		
NAICS 6 Description:	All Other Plastic Product Manufacturing		

Substance Release Report

CAS No:	7446-09-5
Report ID:	
Rpt Period:	2004
Subst Released:	Sulphur dioxide
Air:	
Water:	
Land:	
Total Releases:	
Units:	tonnes

CAS No:	11104-93-1
Report ID:	
Rpt Period:	2004
Subst Released:	Nitrogen oxides (expressed as NO2)
Air:	
Water:	
Land:	

Total Releases:
Units: tonnes

CAS No: NA - M10
Report ID:
Rpt Period: 2004
Subst Released: PM2.5 - Particulate Matter < 2.5 Microns
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: NA - M08
Report ID:
Rpt Period: 2004
Subst Released: PM - Total Particulate Matter
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: 10024-97-2
Report ID:
Rpt Period: 2004
Subst Released: Nitrous oxide
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: 630-08-0
Report ID:
Rpt Period: 2004
Subst Released: Carbon monoxide
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: 74-82-8
Report ID:
Rpt Period: 2004
Subst Released: Methane
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: 811-97-2
Report ID:
Rpt Period: 2004
Subst Released: HFC-134a Hydrofluorocarbon
Air:
Water:
Land:
Total Releases:
Units: tonnes

CAS No: 64742-54-7
Report ID:
Rpt Period: 2004

Subst Released:	MSG#3 - Hydrotreated heavy paraffinic mineral spirits
Air:	0
Water:	
Land:	
Total Releases:	0
Units:	tonnes
CAS No:	1333-86-4
Report ID:	
Rpt Period:	2004
Subst Released:	Carbon black
Air:	0
Water:	
Land:	
Total Releases:	0
Units:	tonnes
CAS No:	NA - M09
Report ID:	
Rpt Period:	2004
Subst Released:	PM10 - Particulate Matter < 10 Microns
Air:	
Water:	
Land:	
Total Releases:	
Units:	tonnes
CAS No:	NA - M16
Report ID:	
Rpt Period:	2004
Subst Released:	Volatile Organic Compounds (VOCs)
Air:	
Water:	
Land:	
Total Releases:	
Units:	tonnes
CAS No:	124-38-9
Report ID:	
Rpt Period:	2004
Subst Released:	Carbon dioxide
Air:	
Water:	
Land:	
Total Releases:	
Units:	tonnes
CAS No:	64741-88-4
Report ID:	
Rpt Period:	2004
Subst Released:	MSG#3 - Solvent refined heavy paraffinic distillate
Air:	0
Water:	
Land:	
Total Releases:	0
Units:	tonnes

25	***20 of 34***	***S/166.1***	***107.9 / -1.67***	***BERICAP INC.*** ***835 SYSCON COURT*** ***BURLINGTON ON***	***GEN***

Generator No:	ON2275500
SIC Code:	326198
SIC Description:	ALL OTHER PLASTIC PRODUCT MANUFACTURING
Approval Years:	2013

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

25	21 of 34	S/166.1	107.9 / -1.67	**Trimac Transportation Service Ltd.** **835 Syscon Court** **Burlington ON**	SPL

Ref No: 5703-AF9HQ8
Year:
Incident Dt: 2016/10/30
Dt MOE Arvl on Scn:
MOE Reported Dt: 2016/10/31
Dt Document Closed: 2016/11/14
Site No: NA

Municipality No:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:

Facility Name:	
MOE Response:	No
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	
Nearest Watercourse:	
Site Name:	Driveway<UNOFFICIAL>
Site Address:	835 Syscon Court
Site Region:	
Site Municipality:	Burlington
Site Lot:	
Site Conc:	
Site Geo Ref Accu:	
Site Map Datum:	
Northing:	4804874
Easting:	601123
Incident Cause:	
Incident Event:	Leak/Break
Environment Impact:	
Nature of Impact:	
Contaminant Qty:	1 L
System Facility Address:	
Client Name:	Trimac Transportation Service Ltd.
Client Type:	
Call Report Locatn Geodata:	
Contaminant Code:	27
Contaminant Name:	COOLANT N.O.S.
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	
Receiving Environment:	Land
Incident Reason:	Operator/Human Error
Incident Summary:	Trimac Transportation: 1L coolant spill to driveway
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Unknown / N/A
SAC Action Class:	Land Spills
Source Type:	

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25 | ***22 of 34*** | ***S/166.1*** | ***107.9 / -1.67*** | ***Bericap Inc.***
835 Syscon Court
Burlington ON L7L 6C5 | ***ECA***

Approval No:	1136-5ZCNBU	**MOE District:**	Halton-Peel
Approval Date:	2005-04-24	**City:**	
Status:	Revoked and/or Replaced	**Longitude:**	-79.75303
Record Type:	ECA	**Latitude:**	43.390045
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Halton	**Geometry Y:**	
Approval Type:	ECA-AIR		
Project Type:	AIR		
Business Name:	Bericap Inc.		
Address:	835 Syscon Court		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/8412-5TUMBZ-14.pdf		
PDF Site Location:			

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25 | ***23 of 34*** | ***S/166.1*** | ***107.9 / -1.67*** | ***BERICAP INC.***
835 SYSCON COURT
BURLINGTON ON L7L 6C5 | ***GEN***

Generator No:	ON2275500
SIC Code:	326198
SIC Description:	ALL OTHER PLASTIC PRODUCT MANUFACTURING
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	jason a Delaharpe
Choice of Contact:	CO_ADMIN
Phone No Admin:	905 634 2248 Ext.331
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	132
Waste Class Name:	NEUTRALIZED WASTES - OTHER METALS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	121
Waste Class Name:	ALKALINE WASTES - HEAVY METALS
Waste Class:	253
Waste Class Name:	EMULSIFIED OILS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS

25	24 of 34	S/166.1	107.9 / -1.67	**BERICAP INC.** **835 SYSCON COURT** **BURLINGTON ON L7L 6C5**	GEN

Generator No:	ON2275500
SIC Code:	326198
SIC Description:	ALL OTHER PLASTIC PRODUCT MANUFACTURING
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	jason a Delaharpe
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	905 634 2248 Ext.331
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	253
Waste Class Name:	EMULSIFIED OILS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	121
Waste Class Name:	ALKALINE WASTES - HEAVY METALS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
25	25 of 34	S/166.1	107.9 / -1.67	**BERICAP INC.** **835 SYSCON COURT** **BURLINGTON ON L7L 6C5**	GEN

Generator No:	ON2275500
SIC Code:	326198

SIC Description:	ALL OTHER PLASTIC PRODUCT MANUFACTURING
Approval Years:	2014
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Paul A Vandeven
Choice of Contact:	CO_ADMIN
Phone No Admin:	905-634-2248 Ext.331
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	121
Waste Class Name:	ALKALINE WASTES - HEAVY METALS
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	253
Waste Class Name:	EMULSIFIED OILS

25	***26 of 34***	***S/166.1***	***107.9 / -1.67***	***BERICAP INC.*** ***835 SYSCON COURT*** ***BURLINGTON ON L7L 6C5***	***GEN***

Generator No:	ON2275500
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	

Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 112 C
Waste Class Name: Acid solutions - containing heavy metals

Waste Class: 113 C
Waste Class Name: Acid solutions - containing other metals and non-metals

Waste Class: 121 C
Waste Class Name: Alkaline slutions - containing heavy metals

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 122 L
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 132 L
Waste Class Name: Neutralized solutions - containing other metals

Waste Class: 145 H
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 146 L
Waste Class Name: Other specified inorganic sludges, slurries or solids

Waste Class: 146 T
Waste Class Name: Other specified inorganic sludges, slurries or solids

Waste Class: 148 L
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 211 H
Waste Class Name: Aromatic solvents and residues

Waste Class: 212 H
Waste Class Name: Aliphatic solvents and residues

Waste Class: 212 L
Waste Class Name: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 213 L
Waste Class Name: Petroleum distillates

Waste Class: 213 T
Waste Class Name: Petroleum distillates

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L

Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 253 L
Waste Class Name: Emulsified oils

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

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25 | 27 of 34 | S/166.1 | 107.9 / -1.67 | **Bericap Inc.**
835 Syscon Crt
Burlington ON L7L 6C5 | **ECA**

Approval No: 1852-A4EP8N
Approval Date: 2017-04-03
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
Approval Type: ECA-AIR
Project Type: AIR
Business Name: Bericap Inc.
Address: 835 Syscon Crt
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6820-9FBLQU-14.pdf
PDF Site Location:

MOE District: Halton-Peel
City:
Longitude: -79.75303
Latitude: 43.390045
Geometry X:
Geometry Y:

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25 | 28 of 34 | S/166.1 | 107.9 / -1.67 | **835 Syscon Court**
Burlington ON L7L 6C5 | **EHS**

Order No: 20180511039
Status: C
Report Type: Standard Report
Report Date: 18-MAY-18
Date Received: 11-MAY-18
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; City Directory

Nearest Intersection:
Municipality: Oakville
Client Prov/State: ON
Search Radius (km): .25
X: -79.75143
Y: 43.389928

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25 | 29 of 34 | S/166.1 | 107.9 / -1.67 | **BERICAP INC.**
835 SYSCON COURT
BURLINGTON ON L7L 6C5 | **GEN**

Generator No: ON2275500
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 113 C

Waste Class Name:	Acid solutions - containing other metals and non-metals
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	148 L
Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	146 L
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	122 L
Waste Class Name:	Alkaline slutions - containing other metals and non-metals (not cyanide)
Waste Class:	213 I
Waste Class Name:	Petroleum distillates
Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	212 H
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	132 L
Waste Class Name:	Neutralized solutions - containing other metals
Waste Class:	211 H
Waste Class Name:	Aromatic solvents and residues
Waste Class:	213 L
Waste Class Name:	Petroleum distillates
Waste Class:	145 H
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	213 T
Waste Class Name:	Petroleum distillates
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	212 L
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	121 C
Waste Class Name:	Alkaline slutions - containing heavy metals
Waste Class:	253 L
Waste Class Name:	Emulsified oils

25	***30 of 34***	***S/166.1***	***107.9 / -1.67***	***BERICAP INC.*** ***835 SYSCON COURT*** ***BURLINGTON ON L7L 6C5***	***GEN***

Generator No:	ON2275500
SIC Code:	

SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 121 C
Waste Class Name: Alkaline slutions - containing heavy metals

Waste Class: 253 L
Waste Class Name: Emulsified oils

Waste Class: 213 T
Waste Class Name: Petroleum distillates

Waste Class: 211 H
Waste Class Name: Aromatic solvents and residues

Waste Class: 212 L
Waste Class Name: Aliphatic solvents and residues

Waste Class: 112 C
Waste Class Name: Acid solutions - containing heavy metals

Waste Class: 146 T
Waste Class Name: Other specified inorganic sludges, slurries or solids

Waste Class: 145 H
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 146 L
Waste Class Name: Other specified inorganic sludges, slurries or solids

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 132 L
Waste Class Name: Neutralized solutions - containing other metals

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 122 L
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 212 H
Waste Class Name: Aliphatic solvents and residues

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 213 L

Waste Class Name: Petroleum distillates

Waste Class: 148 L
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 113 C
Waste Class Name: Acid solutions - containing other metals and non-metals

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

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25 | 31 of 34 | S/166.1 | 107.9 / -1.67 | **BERICAP INC**
835 SYSCON CRT
BURLINGTON ON L7L 6C5 | EASR

Approval No: R-010-3113266229
Status: REGISTERED
Date: 2021-06-16
Record Type: EASR
Link Source: MOFA
Project Type: Air Emissions
Full Address:
Approval Type: EASR-Air Emissions
SWP Area Name: Halton
PDF URL:
PDF Site Location:

MOE District: Halton-Peel
Municipality: BURLINGTON
Latitude: 43.39
Longitude: -79.75166667
Geometry X: -8877914.9232
Geometry Y: 5371523.484599998

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25 | 32 of 34 | S/166.1 | 107.9 / -1.67 | **BERICAP INC.**
835 SYSCON COURT
BURLINGTON ON L7L 6C5 | GEN

Generator No: ON2275500
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213 T
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 112 C
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 213 I
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 253 L
Waste Class Name: EMULSIFIED OILS

Waste Class: 145 H
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252 L

Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	213 L
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	146 T
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	212 L
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	121 C
Waste Class Name:	ALKALINE WASTES - HEAVY METALS
Waste Class:	122 L
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	251 L
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	212 H
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	148 L
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	145 L
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	122 C
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	146 L
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	211 H
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	132 L
Waste Class Name:	NEUTRALIZED WASTES - OTHER METALS
Waste Class:	113 C
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	331 I
Waste Class Name:	WASTE COMPRESSED GASES

25	***33 of 34***	***S/166.1***	***107.9 / -1.67***	***BERICAP INC.*** ***835 SYSCON*** ***BURLINGTON ON***	***NPR2***

NPRI ID:	11662	***Latitude:***	43.3898
Facility ID:	402735, 245310	***Longitude:***	-79.7515

Note: Substances included on NPRI reports for this NPRI ID are summarized below in the NPRI ID Substances Summary section. Substances listed in the Substances Summary are included on the basis of NPRI ID only. For entities (NPRI ID) with mobile plants and/or more than one facility location, substances listed above may or may not have been reported for specific facilities/mobile locations. The list of substances additionally includes those which have been included on the NPRI report with an unknown quantity or a quantity of 0.

For specific details about substance quantities, years, release/transfer/disposal methods, the reader is referred the facility report:

https://pollution-waste.canada.ca/national-release-inventory/?fromYear 1993&toYear 2022&name 11662

NPRI ID Substances Summary

CAS No:	NA - M09	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	PM10 - Particulate Matter < 10 Micrometers		
Name French:	PM10 - Matière particulaire < 10 micromètres		
Sort English:	PM10 - Particulate Matter < 10 Micrometers		
Sort French:	PM10 - Matière particulaire < 10 micromètres		

CAS No:	NA - M10	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Name French:	PM2,5 - Matière particulaire < 2,5 micromètres		
Sort English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Sort French:	PM2,5 - Matière particulaire < 2,5 micromètres		

Geographic Location

DLS Description:		***Datum:***	1983.0
NTS Description:	D-061-F/030-M-5	***Forward Sort Area:***	L7L
Latitude:	43.3898	***SOMA:***	TRUE
Longitude:	-79.7515	***ON PEMA:***	TRUE
Census Subdiv ID:	3524002	***QC PEMA:***	FALSE
Ecozone ID:	8	***Quebec Windsor Corr:***	TRUE
Water Survey ID:	2	***Province Code:***	ON

NPRI ID Facility ID

NPRI ID:	11662
Facility ID:	402735

Facility

Facility ID:	402735	***IDM ID:***	24868
Portable:	FALSE	***AB Approval ID:***	
NAICS Primary:	326198	***GHGRP ID:***	
NAICS Secondary:	0	***ON GHGRP ID:***	
NAICS Tertiary:	0		
Facility Name:	Bericap Inc.		
Website:			

Address

Address1:	835 Syscon
Address2:	
City:	BURLINGTON
Postal Zip:	L7L 6C5
Prov:	

Address Geographic

Latitude:	43.3898	***Datum:***	
Longitude:	-79.7515	***Land Survey:***	
UTM Easting:	0.000000	***Topograph:***	
UTM Northing:	0.000000	***Additional Info:***	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	326198	***Start Date:***	1993
Record Year:	1997	***End Date:***	2001
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2002	***End Date:***	2006
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2007	***End Date:***	2011
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2012	***End Date:***	2016
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NAICS Code:	326198	***Start Date:***	2017
Record Year:	2017	***End Date:***	2021
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NPRI Report

Report ID:	314743	***Repor Type ID:***	1
Report Year:	2020	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	136
Company ID:	172851	***Is Compressor:***	FALSE
Facility ID:	402735	***Is NPRI Part 4:***	FALSE
SWR Report ID:	166531	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Kristyn	***Extension:***	247
Last Name:	Pacaud	***Fax:***	
Email:	kristyn.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Corporate Systems Specialist		
Language:	E		
Company Name:			

NPRI Report

Report ID:	308424	***Repor Type ID:***	1
Report Year:	2019	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	145
Company ID:	162949	***Is Compressor:***	FALSE
Facility ID:	402735	***Is NPRI Part 4:***	FALSE
SWR Report ID:	159780	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Kristyn	***Extension:***	247
Last Name:	Pacaud	***Fax:***	
Email:	kristyn.pacaud@bericap.com		

Description En: Public Contact
Description Fr: Responsable des renseignements au public
Position: Corporate Systems Specialist
Language: E
Company Name:

NPRI ID Facility ID

NPRI ID: 11662
Facility ID: 245310

Facility

Facility ID:	245310	**IDM ID:**	24868
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	326198	**GHGRP ID:**	0
NAICS Secondary:	0	**ON GHGRP ID:**	0
NAICS Tertiary:	0		

Facility Name: Bericap Inc.
Website: www.bericap.com

Address

Address1: 835 Syscon
Address2:
City: BURLINGTON
Postal Zip: L7L6C5
Prov:

Address Geographic

Latitude:	49.76453	**Datum:**	1983
Longitude:	-89.28594	**Land Survey:**	
UTM Easting:	0.000000	**Topograph:**	
UTM Northing:	0.000000	**Additional Info:**	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	326198	**Start Date:**	1993
Record Year:	1997	**End Date:**	2001

Key Indus Sector En: Plastics and Rubber
Key Indus Sector Fr: Plastiques et caoutchouc
NAICS Title En: All Other Plastic Product Manufacturing
NAICS Title Fr: Fabrication de tous les autres produits en plastique

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	**Start Date:**	1993
Record Year:	2002	**End Date:**	2006

Key Indus Sector En: Plastics and Rubber
Key Indus Sector Fr: Plastiques et caoutchouc
NAICS Title En: All Other Plastic Product Manufacturing
NAICS Title Fr: Fabrication de tous les autres produits en plastique

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2007	***End Date:***	2011
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2012	***End Date:***	2016
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NAICS Code:	326198	***Start Date:***	2017
Record Year:	2017	***End Date:***	2021
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NPRI Report

Report ID:	46813	***Repor Type ID:***	1
Report Year:	2012	***New Reporter:***	TRUE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	111268	***Is Compressor:***	FALSE
Facility ID:	245310	***Is NPRI Part 4:***	TRUE
SWR Report ID:	21778	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.

Trade Name En:
Trade Name Fr:
DUNS No: 254961360
Website: www.bericap.com

NPRI Report Contact

Contact Type: NPRI
First Name: Kristyn
Last Name: Pacaud
Email: kristyn.pacaud@bericap.com
Description En: Public Contact
Description Fr: Responsable des renseignements au public
Position: Quality Systems Specialist
Language: E
Company Name:
Phone: 9056342248
Extension: 247
Fax:

NPRI Report

Report ID: 35327
Report Year: 2013
NPRI ID: 11662
Company ID: 111268
Facility ID: 245310
SWR Report ID: 30322
Repor Type ID: 1
New Reporter: FALSE
No of Employees: 150
Is Compressor: FALSE
Is NPRI Part 4: TRUE
Is Battery: FALSE

Company

Company Name: Bericap North America Inc.
Trade Name En:
Trade Name Fr:
DUNS No: 254961360
Website: www.bericap.com

NPRI Report Contact

Contact Type: NPRI
First Name: Kristyn
Last Name: Pacaud
Email: kristyn.pacaud@bericap.com
Description En: Public Contact
Description Fr: Responsable des renseignements au public
Position: Quality Systems Specialist
Language: E
Company Name:
Phone: 9056342248
Extension: 247
Fax:

NPRI ID Facility ID

NPRI ID: 11662
Facility ID: 280209

NPRI Report

Report ID: 89674
Report Year: 2017
NPRI ID: 11662
Company ID: 122334
Facility ID: 280209
SWR Report ID: 97240
Repor Type ID: 1
New Reporter: FALSE
No of Employees: 150
Is Compressor: FALSE
Is NPRI Part 4: TRUE
Is Battery: FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Kristyn	***Extension:***	247
Last Name:	Pacaud	***Fax:***	
Email:	kristyn.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Corporate Systems Specialist		
Language:	E		
Company Name:			

NPRI Report

Report ID:	89675	***Repor Type ID:***	1
Report Year:	2016	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	122334	***Is Compressor:***	FALSE
Facility ID:	280209	***Is NPRI Part 4:***	TRUE
SWR Report ID:	81614	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Kristyn	***Extension:***	247
Last Name:	Pacaud	***Fax:***	
Email:	kristyn.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Quality Systems Specialist		
Language:	E		
Company Name:			

NPRI Report

Report ID:	27695	***Repor Type ID:***	1
Report Year:	2014	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	113734	***Is Compressor:***	FALSE
Facility ID:	280209	***Is NPRI Part 4:***	TRUE
SWR Report ID:	54277	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.

Trade Name En:
Trade Name Fr:
DUNS No: 254961360
Website: www.bericap.com

NPRI Report Contact

Contact Type: NPRI
First Name: Kristyn
Last Name: Pacaud
Email: kristyn.pacaud@bericap.com
Description En: Public Contact
Description Fr: Responsable des renseignements au public
Position: Corporate Systems Specialist
Language: E
Company Name:
Phone: 9056342248
Extension: 247
Fax:

NPRI Report

Report ID: 89676
Report Year: 2018
NPRI ID: 11662
Company ID: 122334
Facility ID: 280209
SWR Report ID: 150810
Repor Type ID: 1
New Reporter: FALSE
No of Employees: 145
Is Compressor: FALSE
Is NPRI Part 4: TRUE
Is Battery: FALSE

Company

Company Name: Bericap North America Inc.
Trade Name En:
Trade Name Fr:
DUNS No: 254961360
Website:

NPRI Report Contact

Contact Type: NPRI
First Name: Kristyn
Last Name: Pacaud
Email: kristyn.pacaud@bericap.com
Description En: Public Contact
Description Fr: Responsable des renseignements au public
Position: Corporate Systems Specialist
Language: E
Company Name:
Phone: 9056342248
Extension: 247
Fax:

NPRI Report

Report ID: 16113
Report Year: 2015
NPRI ID: 11662
Company ID: 113735
Facility ID: 280209
SWR Report ID: 68828
Repor Type ID: 1
New Reporter: FALSE
No of Employees: 150
Is Compressor: FALSE
Is NPRI Part 4: TRUE
Is Battery: FALSE

Company

Company Name: Bericap Inc.
Trade Name En:
Trade Name Fr:
DUNS No: 254961360

Website: www.bericap.com

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9056342248
First Name:	Kristyn	**Extension:**	247
Last Name:	Pacaud	**Fax:**	
Email:	kristyn.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Corporate Systems Specialist		
Language:	E		
Company Name:			

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25 | **34 of 34** | **S/166.1** | **107.9 / -1.67** | **BERICAP NORTH AMERICA INC.**
835 SYSCON COURT
BURLINGTON ON L7L6C5 | **NPR2**

NPRI ID:	11662	**Latitude:**	43.3898
Facility ID:	245265, 358407	**Longitude:**	-79.7515

Note: Substances included on NPRI reports for this NPRI ID are summarized below in the NPRI ID Substances Summary section. Substances listed in the Substances Summary are included on the basis of NPRI ID only. For entities (NPRI ID) with mobile plants and/or more than one facility location, substances listed above may or may not have been reported for specific facilities/mobile locations. The list of substances additionally includes those which have been included on the NPRI report with an unknown quantity or a quantity of 0.

For specific details about substance quantities, years, release/transfer/disposal methods, the reader is referred the facility report:

https://pollution-waste.canada.ca/national-release-inventory/?fromYear 1993&toYear 2022&name 11662

NPRI ID Substances Summary

CAS No:	NA - M09	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	PM10 - Particulate Matter < 10 Micrometers		
Name French:	PM10 - Matière particulaire < 10 micromètres		
Sort English:	PM10 - Particulate Matter < 10 Micrometers		
Sort French:	PM10 - Matière particulaire < 10 micromètres		

CAS No:	NA - M10	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Name French:	PM2,5 - Matière particulaire < 2,5 micromètres		
Sort English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Sort French:	PM2,5 - Matière particulaire < 2,5 micromètres		

Geographic Location

DLS Description:		**Datum:**	1983.0
NTS Description:	D-061-F/030-M-5	**Forward Sort Area:**	L7L
Latitude:	43.3898	**SOMA:**	TRUE
Longitude:	-79.7515	**ON PEMA:**	TRUE
Census Subdiv ID:	3524002	**QC PEMA:**	FALSE
Ecozone ID:	8	**Quebec Windsor Corr:**	TRUE
Water Survey ID:	2	**Province Code:**	ON

NPRI ID Facility ID

NPRI ID: 11662

Facility ID: 245265

Facility

Facility ID:	245265	***IDM ID:***	11321
Portable:	FALSE	***AB Approval ID:***	0
NAICS Primary:	326198	***GHGRP ID:***	0
NAICS Secondary:	0	***ON GHGRP ID:***	0
NAICS Tertiary:	0		
Facility Name:	Bericap North America Inc.		
Website:	www.bericap.com		

Address

Address1:	835 Syscon Court
Address2:	
City:	BURLINGTON
Postal Zip:	L7L6C5
Prov:	

Address Geographic

Latitude:	43.3898	***Datum:***	1983
Longitude:	-79.7515	***Land Survey:***	
UTM Easting:	0.000000	***Topograph:***	
UTM Northing:	0.000000	***Additional Info:***	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	326198	***Start Date:***	1993
Record Year:	1997	***End Date:***	2001
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2002	***End Date:***	2006
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2007	***End Date:***	2011
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2012	***End Date:***	2016
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NAICS Code:	326198	***Start Date:***	2017
Record Year:	2017	***End Date:***	2021
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NPRI Report

Report ID:	122466	***Repor Type ID:***	1
Report Year:	2010	***New Reporter:***	TRUE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	111268	***Is Compressor:***	FALSE
Facility ID:	245265	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20100000011662	***Is Battery:***	FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	www.bericap.com

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248

First Name:	Mike	**Extension:**	321
Last Name:	Pacaud	**Fax:**	9056347780
Email:	mike.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Trainer/Safety Specialist		
Language:			
Company Name:			

NPRI Report

Report ID:	55930	**Repor Type ID:**	1
Report Year:	2011	**New Reporter:**	FALSE
NPRI ID:	11662	**No of Employees:**	150
Company ID:	111268	**Is Compressor:**	FALSE
Facility ID:	245265	**Is NPRI Part 4:**	TRUE
SWR Report ID:	6744	**Is Battery:**	FALSE

Company

Company Name:	Bericap North America Inc.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	www.bericap.com

NPRI Report Comment

Description En:	NPRI - Report Submission
Description Fr:	INRP - Soumission de rapport
Comment:	Refer to Jason Kelman if there are any discrepancies Trainer/Safety Specialist jason.kelman@bericap.com 906-634-2248 x354
Note:	Many NPRI Report Comments are truncated in the NPRI data.

NPRI Report Comment

Description En:	General comments about the facility
Description Fr:	Commentaires généraux à propos de l'installation
Comment:	shutdown: December 23-December 31
Note:	Many NPRI Report Comments are truncated in the NPRI data.

NPRI ID Facility ID

NPRI ID:	11662
Facility ID:	358407

Facility

Facility ID:	358407	**IDM ID:**	0
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	326198	**GHGRP ID:**	0
NAICS Secondary:	0	**ON GHGRP ID:**	0
NAICS Tertiary:	0		
Facility Name:	BERICAP NORTH AMERICA INC.		
Website:	www.bericap.com		

Address

Address1:	835 Syscon Court
Address2:	
City:	BURLINGTON
Postal Zip:	L7L6C5
Prov:	

Address Geographic

Latitude:	43.3898	***Datum:***	1983
Longitude:	-79.7515	***Land Survey:***	
UTM Easting:	0.000000	***Topograph:***	
UTM Northing:	0.000000	***Additional Info:***	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	326198	***Start Date:***	1993
Record Year:	1997	***End Date:***	2001
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2002	***End Date:***	2006
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2007	***End Date:***	2011
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All Other Plastic Product Manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	326198	***Start Date:***	1993
Record Year:	2012	***End Date:***	2016
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NAICS Code:	326198	***Start Date:***	2017
Record Year:	2017	***End Date:***	2021
Key Indus Sector En:	Plastics and Rubber		
Key Indus Sector Fr:	Plastiques et caoutchouc		
NAICS Title En:	All other plastic product manufacturing		
NAICS Title Fr:	Fabrication de tous les autres produits en plastique		

NAICS Description En:

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in manufacturing plastic products.

NAICS Description Fr:

Cette classe canadienne comprend les établissements qui ne figurent dans aucune autre classe canadienne et dont l'activité principale est la fabrication de produits en plastique.

NPRI Report

Report ID:	107091	***Repor Type ID:***	1
Report Year:	2008	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	133283	***Is Compressor:***	FALSE
Facility ID:	358407	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20080000011662	***Is Battery:***	FALSE

Company

Company Name:	BERICAP NORTH AMERICA INC.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	www.bericap.com

NPRI Report Comment

Description En:	NPRI - Report Submission
Description Fr:	INRP - Soumission de rapport
Comment:	The facility met the reporting requirements for PM2.5 for the reporting year
Note:	Many NPRI Report Comments are truncated in the NPRI data.

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Mike	***Extension:***	321
Last Name:	Pacaud	***Fax:***	9056347780
Email:	mike.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Trainer/Safety Specialist		
Language:			
Company Name:			

NPRI Report

Report ID:	139288	***Repor Type ID:***	1
Report Year:	2009	***New Reporter:***	FALSE
NPRI ID:	11662	***No of Employees:***	150
Company ID:	133283	***Is Compressor:***	FALSE
Facility ID:	358407	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20090000011662	***Is Battery:***	FALSE

Company

Company Name:	BERICAP NORTH AMERICA INC.
Trade Name En:	
Trade Name Fr:	
DUNS No:	254961360
Website:	www.bericap.com

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056342248
First Name:	Mike	***Extension:***	321
Last Name:	Pacaud	***Fax:***	9056347780
Email:	mike.pacaud@bericap.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Trainer/Safety Specialist		
Language:			
Company Name:			

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26 | ***1 of 1*** | ***WNW/169.4*** | ***113.9 / 4.38*** | ***926 BURLOAK DR Burlington ON*** | ***WWIS***

Well ID:	7246270	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:		***Data Entry Status:***	
Use 2nd:		***Data Src:***	
Final Well Status:	Abandoned-Other	***Date Received:***	08/10/2015
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z214747	***Contractor:***	7472
Tag:		***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	4.9
Latitude:	43.3928252639929
Longitude:	-79.7537838164816

Path:

Bore Hole Information

Bore Hole ID:	1005550180	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	600928.00
Code OB Desc:		***North83:***	4805193.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	07/16/2015	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1005684642
Layer:	1
Color:	
General Color:	
Mat1:	
Most Common Material:	
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	4.900000095367432
Formation End Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	1005684648
Method Construction Code:	
Method Construction:	
Other Method Construction:	

Pipe Information

Pipe ID:	1005684641
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1005684646
Layer:	
Material:	
Open Hole or Material:	
Depth From:	
Depth To:	
Casing Diameter:	

Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684647
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID: 1005684645
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005684643
Diameter: 21.0
Depth From: 0.0
Depth To: 2.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Hole Diameter

Hole ID: 1005684644
Diameter: 5.199999809265137
Depth From: 2.0
Depth To: 4.900000095367432
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID:	1005550180	**Tag No:**	
Depth M:	4.9	**Contractor:**	7472
Year Completed:	2015	**Latitude:**	43.3928252639929
Well Completed Dt:	07/16/2015	**Longitude:**	-79.7537838164816
Audit No:	Z214747	**Y:**	43.39282526177565
Path:	724\7246270.pdf	**X:**	-79.75378366673183

27	1 of 1	WNW/171.6	114.0 / 4.47	**926 BURLOAK DR** **Burlington ON**	WWIS

Well ID:	7246265	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Abandoned-Other	**Date Received:**	08/10/2015
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	

Audit No:	Z214742	**Contractor:**	7472
Tag:	A134140	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	30.5
Latitude:	43.3927897927945
Longitude:	-79.7538339332421
Path:	

Bore Hole Information

Bore Hole ID:	1005550155	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600924.00
Code OB Desc:		**North83:**	4805189.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	07/16/2015	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1005684602
Layer:	1
Color:	
General Color:	
Mat1:	
Most Common Material:	
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	30.5
Formation End Depth UOM:	m

Method of Construction & Well

Use

Method Construction ID: 1005684608
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 1005684601
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1005684606
Layer:
Material:
Open Hole or Material:
Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684607
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID: 1005684605
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005684603
Diameter: 21.0
Depth From: 0.0
Depth To: 2.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Hole Diameter

Hole ID: 1005684604
Diameter: 5.199999809265137
Depth From: 2.0

Depth To:	30.5
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	1005550155	**Tag No:**	A134140
Depth M:	30.5	**Contractor:**	7472
Year Completed:	2015	**Latitude:**	43.3927897927945
Well Completed Dt:	07/16/2015	**Longitude:**	-79.7538339332421
Audit No:	Z214742	**Y:**	43.392789790887164
Path:	724\7246265.pdf	**X:**	-79.75383378372875

---

28 **1 of 1** **SE/172.6** **106.8 / -2.72** **BURLOAK DR**
Burlington ON **WWIS**

Well ID:	7350189	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Monitoring and Test Hole	**Date Received:**	12/24/2019
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z324903	**Contractor:**	7644
Tag:	A282835	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/735\7350189.pdf

Additional Detail(s) (Map)

Well Completed Date:	11/25/2019
Year Completed:	2019
Depth (m):	4.8768
Latitude:	43.3905517258266
Longitude:	-79.7500769184396
Path:	735\7350189.pdf

Bore Hole Information

Bore Hole ID:	1007820469	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601232.00
Code OB Desc:		**North83:**	4804945.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	11/25/2019	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			

Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 1008230656
Layer: 2
Color: 6
General Color: BROWN
Mat1: 01
Most Common Material: FILL
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.5
Formation End Depth: 3.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008230658
Layer: 4
Color: 7
General Color: RED
Mat1: 17
Most Common Material: SHALE
Mat2: 05
Mat2 Desc: CLAY
Mat3:
Mat3 Desc:
Formation Top Depth: 10.0
Formation End Depth: 16.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008230657
Layer: 3
Color: 7
General Color: RED
Mat1: 05
Most Common Material: CLAY
Mat2: 17
Mat2 Desc: SHALE
Mat3:
Mat3 Desc:
Formation Top Depth: 3.0
Formation End Depth: 10.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008230655
Layer: 1
Color: 8

General Color:	BLACK
Mat1:	27
Most Common Material:	OTHER
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	0.5
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1008232866
Layer:	2
Plug From:	5.0
Plug To:	16.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1008232865
Layer:	1
Plug From:	0.0
Plug To:	5.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1008235889
Method Construction Code:	B
Method Construction:	Other Method
Other Method Construction:	AUGER

Pipe Information

Pipe ID:	1008228614
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1008236929
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	6.0
Casing Diameter:	2.0
Casing Diameter UOM:	Inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1008237863
Layer:	1
Slot:	.01

Screen Top Depth:	6.0
Screen End Depth:	16.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.375

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1008239064
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1008234908
Diameter:	6.0
Depth From:	0.0
Depth To:	16.0
Hole Depth UOM:	ft
Hole Diameter UOM:	Inch

Links

Bore Hole ID:	1007820469	**Tag No:**	A282835
Depth M:	4.8768	**Contractor:**	7644
Year Completed:	2019	**Latitude:**	43.3905517258266
Well Completed Dt:	11/25/2019	**Longitude:**	-79.7500769184396
Audit No:	Z324903	**Y:**	43.390551723454976
Path:	735\7350189.pdf	**X:**	-79.75007676918962

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29 **1 of 1** **SE/172.8** **106.9 / -2.67** **ON** **BORE**

Borehole ID:	891029	**Inclin FLG:**	No
OGF ID:	215583871	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	24-JAN-1984	**Municipality:**	
Static Water Level:		**Lot:**	LOT 35
Primary Water Use:		**Township:**	TRAFALGAR
Sec. Water Use:		**Latitude DD:**	43.390702
Total Depth m:	5	**Longitude DD:**	-79.749852
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	601250
Drill Method:	Solid stem auger	**Northing:**	4804962
Orig Ground Elev m:	105	**Location Accuracy:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Elev Reliabil Note: | **Accuracy:** Within 10 metres
DEM Ground Elev m: 108
Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway
Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID: 8503594 | **Mat Consistency:** Very Stiff
Top Depth: .2 | **Material Moisture:**
Bottom Depth: 2 | **Material Texture:**
Material Color: Red | **Non Geo Mat Type:**
Material 1: Clay | **Geologic Formation:**
Material 2: Silty | **Geologic Group:**
Material 3: Shaly | **Geologic Period:**
Material 4: | **Depositional Gen:**
Gsc Material Description:
Stratum Description: Red silty clay (CL) occ. Shaley seams. Very stiff to hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID: 8503593 | **Mat Consistency:**
Top Depth: 0 | **Material Moisture:**
Bottom Depth: .2 | **Material Texture:**
Material Color: | **Non Geo Mat Type:**
Material 1: Topsoil | **Geologic Formation:**
Material 2: | **Geologic Group:**
Material 3: | **Geologic Period:**
Material 4: | **Depositional Gen:**
Gsc Material Description:
Stratum Description: Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID: 8503595 | **Mat Consistency:**
Top Depth: 2 | **Material Moisture:**
Bottom Depth: 5 | **Material Texture:**
Material Color: Red | **Non Geo Mat Type:**
Material 1: Bedrock | **Geologic Formation:**
Material 2: Shale | **Geologic Group:**
Material 3: | **Geologic Period:**
Material 4: | **Depositional Gen:**
Gsc Material Description:
Stratum Description: Weathered sound. Bedrock Queenston Formation Red shale. Weathered Zone **Note: Many records provided by the department have a truncated Stratum Description] field.

30	1 of 1	ESE/173.5	106.9 / -2.68	lot 35 con 3 ON	WWIS

Well ID: 7385748 | **Flowing (Y/N):**
Construction Date: | **Flow Rate:**
Use 1st: | **Data Entry Status:** Yes
Use 2nd: | **Data Src:**
Final Well Status: | **Date Received:** 04/28/2021
Water Type: | **Selected Flag:** TRUE
Casing Material: | **Abandonment Rec:**
Audit No: Z360387 | **Contractor:** 7644
Tag: A312097 | **Form Version:** 7
Constructn Method: | **Owner:**
Elevation (m): | **County:** HALTON
Elevatn Reliabilty: | **Lot:** 035
Depth to Bedrock: | **Concession:** 03
Well Depth: | **Concession Name:** DS S
Overburden/Bedrock: | **Easting NAD83:**
Pump Rate: | **Northing NAD83:**

Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008653480	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601309.00
Code OB Desc:		**North83:**	4805039.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	04/01/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008653480	**Tag No:**	A312097
Depth M:		**Contractor:**	7644
Year Completed:	2021	**Latitude:**	43.3913875503355
Well Completed Dt:	04/01/2021	**Longitude:**	-79.7491090072255
Audit No:	Z360387	**Y:**	43.39138754749166
Path:	738\7385748.pdf	**X:**	-79.74910885806122

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31 ***1 of 1*** ***SE/183.9*** ***106.8 / -2.71*** ***ON*** ***BORE***

Borehole ID:	891028	**Inclin FLG:**	No
OGF ID:	215583870	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	19-JAN-1984	**Municipality:**	
Static Water Level:		**Lot:**	LOT 35
Primary Water Use:		**Township:**	TRAFALGAR
Sec. Water Use:		**Latitude DD:**	43.390567
Total Depth m:	11.1	**Longitude DD:**	-79.749842
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	601251
Drill Method:	Solid stem auger	**Northing:**	4804947
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	108		
Concession:	CON 3 SOUTH OF DUNDAS ST		
Location D:	Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway		
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	8503591	**Mat Consistency:**	Hard
Top Depth:	.3	**Material Moisture:**	

Bottom Depth:	1.8	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silty	**Geologic Group:**	
Material 3:	Shaly	**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	Red silty clay (CL) occ. Shaley seams hard **Note: Many records provided by the department have a truncated Stratum Description] field.		

Geology Stratum ID:	8503592	**Mat Consistency:**	
Top Depth:	1.8	**Material Moisture:**	
Bottom Depth:	11.1	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	Weathered sound. Bedrock Queenston Formation Red shale, with a weathered zone **Note: Many records provided by the department have a truncated Stratum Description] field.		

Geology Stratum ID:	8503590	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.		

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32 **1 of 1** **SE/184.1** **106.8 / -2.70** **ON** **BORE**

Borehole ID:	891026	**Inclin FLG:**	No
OGF ID:	215583868	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	23-JAN-1984	**Municipality:**	
Static Water Level:		**Lot:**	LOT 1
Primary Water Use:		**Township:**	NELSON
Sec. Water Use:		**Latitude DD:**	43.390381
Total Depth m:	5	**Longitude DD:**	-79.750154
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	601226
Drill Method:	Solid stem auger	**Northing:**	4804926
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	108		
Concession:	CON 3 SOUTH OF DUNDAS ST		
Location D:	Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway		
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	8503586	**Mat Consistency:**	
Top Depth:	2	**Material Moisture:**	
Bottom Depth:	5	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	

Material 1:	Bedrock	***Geologic Formation:***	
Material 2:	Shale	***Geologic Group:***	
Material 3:		***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	Weathered, sound. Bedrock Queenston Formation Red shale **Note: Many records provided by the department have a truncated Stratum Description] field.		

Geology Stratum ID:	8503585	***Mat Consistency:***	Hard
Top Depth:	.3	***Material Moisture:***	
Bottom Depth:	2	***Material Texture:***	
Material Color:	Red	***Non Geo Mat Type:***	
Material 1:	Clay	***Geologic Formation:***	
Material 2:	Silty	***Geologic Group:***	
Material 3:	Shaly	***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	Red silty clay (CL) occ. Shaley layers hard.		

Geology Stratum ID:	8503584	***Mat Consistency:***	
Top Depth:	0	***Material Moisture:***	
Bottom Depth:	.3	***Material Texture:***	
Material Color:		***Non Geo Mat Type:***	
Material 1:	Topsoil	***Geologic Formation:***	
Material 2:		***Geologic Group:***	
Material 3:		***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.		

33	***1 of 6***	***SW/185.3***	***109.8 / 0.30***	***FAB INDUSTRIES INC.*** ***5490 HARVESTER ROAD*** ***BURLINGTON ON L7L 5V4***	***GEN***

Generator No:	ON2300900
SIC Code:	6351
SIC Description:	GARAGES(GEN. REPAIR)
Approval Years:	97,98,99,00,01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS

33	***2 of 6***	***SW/185.3***	***109.8 / 0.30***	***Precision Metal Cutting Inc.*** ***5490 Harvester Road*** ***Burlington ON L7L 5V4***	***GEN***

Generator No:	ON5652938
SIC Code:	332710
SIC Description:	Machine Shops
Approval Years:	04,05
PO Box No:	
Country:	
Status:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

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33 | ***3 of 6*** | ***SW/185.3*** | ***109.8 / 0.30*** | ***Precision Metal Cutting*** ***5490 Harvester Rd*** ***Burlington ON L7L 5V4*** | ***SCT***

Established: 2004
Plant Size (ft²): 12000
Employment: 10

--Details--
Description: Steel Wire Drawing
SIC/NAICS Code: 331222

Description: All Other Miscellaneous Fabricated Metal Product Manufacturing
SIC/NAICS Code: 332999

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33 | ***4 of 6*** | ***SW/185.3*** | ***109.8 / 0.30*** | ***Navona Realty Services Inc.*** ***5490 Harvester Road*** ***Burlington ON L7L 5V4*** | ***GEN***

Generator No: ON5205237
SIC Code: 531111
SIC Description: Lessors of Residential Buildings and Dwellings (ex
Approval Years: 06
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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33 | ***5 of 6*** | ***SW/185.3*** | ***109.8 / 0.30*** | ***CF + D Custom Fireplace Design Inc.*** ***5490 Harvester Road Burlington, Regional*** ***Municipality of Halton CITY OF BURLINGTON*** ***ON*** | ***EBR***

EBR Registry No: 011-5899
Ministry Ref No: 2524-8RGQB4
Notice Type: Instrument Decision
Notice Stage:
Decision Posted:
Exception Posted:
Section:
Act 1:

Notice Date:	February 26, 2015	**Act 2:**	
Proposal Date:	March 09, 2012	**Site Location Map:**	
Year:	2012		
Instrument Type:	(EPA Part II.1-air) - Environmental Compliance Approval (project type: air)		
Off Instrument Name:			
Posted By:			
Company Name:	CF + D Custom Fireplace Design Inc.		
Site Address:			
Location Other:			
Proponent Name:			
Proponent Address:	5490 Harvester Road, Burlington Ontario, Canada L7L 5V4		
Comment Period:			
URL:			

Site Location Details:

5490 Harvester Road Burlington, Regional Municipality of Halton CITY OF BURLINGTON

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33 **6 of 6** **SW/185.3** **109.8 / 0.30** **ACCESS SECURITY**
5490 HARVESTER ROAD UNIT #1
BURLINGTON ON L7L 5V4 **GEN**

Generator No:	ON7531498
SIC Code:	339990
SIC Description:	ALL OTHER MISCELLANEOUS MANUFACTURING
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES

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34 **1 of 1** **SW/188.9** **109.8 / 0.30** **HARVESTER RD NEAR BURLOAK DR**
Burlington ON **WWIS**

Well ID:	7351617	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	01/14/2020
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z323876	**Contractor:**	7675
Tag:	A273283	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	

Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: BURLINGTON CITY
Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 12/06/2019
Year Completed: 2019
Depth (m): 6.096
Latitude: 43.3907766202147
Longitude: -79.7533566106844
Path:

Bore Hole Information

Bore Hole ID: 1007897360
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 12/06/2019
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 600966.00
North83: 4804966.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1008181985
Layer: 2
Color:
General Color:
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3: 92
Mat3 Desc: WEATHERED
Formation Top Depth: 5.0
Formation End Depth: 20.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008181984
Layer: 1
Color:
General Color:
Mat1: 28
Most Common Material: SAND

Mat2: 11
Mat2 Desc: GRAVEL
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 5.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008182333
Layer: 1
Plug From: 0.0
Plug To: 8.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008182334
Layer: 2
Plug From: 8.0
Plug To: 20.0
Plug Depth UOM: ft

Pipe Information

Pipe ID: 1008181723
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008182800
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: Inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008182949
Layer: 1
Slot: 10
Screen Top Depth: 10.0
Screen End Depth: 20.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008183115

Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	No

Water Details

Water ID:	1008182981
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	
Water Found Depth UOM:	

Hole Diameter

Hole ID:	1008182484
Diameter:	6.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	Inch

Links

Bore Hole ID:	1007897360	***Tag No:***	A273283
Depth M:	6.096	***Contractor:***	7675
Year Completed:	2019	***Latitude:***	43.3907766202147
Well Completed Dt:	12/06/2019	***Longitude:***	-79.7533566106844
Audit No:	Z323876	***Y:***	43.39077661749198
Path:		***X:***	-79.75335646153553

35 ***1 of 1*** ***SE/189.6*** ***106.8 / -2.73*** ***ON*** ***BORE***

Borehole ID:	891031	***Inclin FLG:***	No
OGF ID:	215583873	***SP Status:***	Initial Entry
Status:	Decommissioned	***Surv Elev:***	No
Type:	Borehole	***Piezometer:***	No
Use:	Geotechnical/Geological Investigation	***Primary Name:***	
Completion Date:	19-JAN-1984	***Municipality:***	
Static Water Level:		***Lot:***	LOT 1
Primary Water Use:		***Township:***	NELSON
Sec. Water Use:		***Latitude DD:***	43.390398
Total Depth m:	9.2	***Longitude DD:***	-79.750006
Depth Ref:	Ground Surface	***UTM Zone:***	17
Depth Elev:		***Easting:***	601238
Drill Method:	Solid stem auger	***Northing:***	4804928
Orig Ground Elev m:	105	***Location Accuracy:***	
Elev Reliabil Note:		***Accuracy:***	Within 10 metres
DEM Ground Elev m:	108		

Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway
Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID: 8503599
Top Depth: 0
Bottom Depth: .3
Material Color:
Material 1: Topsoil
Material 2:
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 8503601
Top Depth: 1.3
Bottom Depth: 9.2
Material Color: Red
Material 1: Bedrock
Material 2: Shale
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: Weathered sound. Bedrock Queenston Formation Red shale **Note: Many records provided by the department have a truncated Stratum Description] field.

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 8503600
Top Depth: .3
Bottom Depth: 1.3
Material Color: Red
Material 1: Clay
Material 2: Silty
Material 3: Shaly
Material 4:
Gsc Material Description:
Stratum Description: Red silty clay (CL) occ. Shaley layers Hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Mat Consistency: Hard
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

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36 **1 of 1** **SE/190.5** **107.0 / -2.58** **ON** **BORE**

Borehole ID: 891027
OGF ID: 215583869
Status: Decommissioned
Type: Borehole
Use: Geotechnical/Geological Investigation
Completion Date: 24-JAN-1984
Static Water Level:
Primary Water Use:
Sec. Water Use:
Total Depth m: 4.9
Depth Ref: Ground Surface
Depth Elev:
Drill Method: Solid stem auger
Orig Ground Elev m: 105
Elev Reliabil Note:
DEM Ground Elev m: 108
Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville

Inclin FLG: No
SP Status: Initial Entry
Surv Elev: No
Piezometer: No
Primary Name:
Municipality:
Lot: LOT 35
Township: TRAFALGAR
Latitude DD: 43.390655
Longitude DD: -79.749618
UTM Zone: 17
Easting: 601269
Northing: 4804957
Location Accuracy:
Accuracy: Within 10 metres

Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway

Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID:	8503588	***Mat Consistency:***	Stiff
Top Depth:	.3	***Material Moisture:***	
Bottom Depth:	1.7	***Material Texture:***	
Material Color:	Red	***Non Geo Mat Type:***	
Material 1:	Clay	***Geologic Formation:***	
Material 2:	Silty	***Geologic Group:***	
Material 3:	Shaly	***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	Red silty clay (CL) occ. Shaley layers. Stiff to hard **Note: Many records provided by the department have a truncated Stratum Description] field.		

Geology Stratum ID:	8503589	***Mat Consistency:***	
Top Depth:	1.7	***Material Moisture:***	
Bottom Depth:	4.9	***Material Texture:***	
Material Color:		***Non Geo Mat Type:***	
Material 1:	Bedrock	***Geologic Formation:***	
Material 2:		***Geologic Group:***	
Material 3:		***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	Weathered, sound.		

Geology Stratum ID:	8503587	***Mat Consistency:***	
Top Depth:	0	***Material Moisture:***	
Bottom Depth:	.3	***Material Texture:***	
Material Color:		***Non Geo Mat Type:***	
Material 1:	Topsoil	***Geologic Formation:***	
Material 2:		***Geologic Group:***	
Material 3:		***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.		

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37 ***1 of 1*** ***SE/193.6*** ***106.8 / -2.74*** ***burloak dr. ON*** ***WWIS***

Well ID:	7355159	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Test Hole	***Data Entry Status:***	
Use 2nd:	Monitoring	***Data Src:***	
Final Well Status:	Observation Wells	***Date Received:***	11/28/2018
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z289551	***Contractor:***	7644
Tag:	A250056	***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 07/17/2018
Year Completed: 2018
Depth (m): 6.7056
Latitude: 43.3903793322134
Longitude: -79.7499569919717
Path:

Bore Hole Information

Bore Hole ID: 1008221259
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 07/17/2018
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 601242.00
North83: 4804926.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1008268364
Layer: 1
Color:
General Color:
Mat1: 27
Most Common Material: OTHER
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 22.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008268778
Layer: 1
Plug From: 0.0
Plug To: 1.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008268779
Layer: 2
Plug From: 1.0

Plug To: 11.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008268780
Layer: 3
Plug From: 11.0
Plug To: 22.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008269251
Method Construction Code: 7
Method Construction: Diamond
Other Method Construction:

Pipe Information

Pipe ID: 1008267836
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008269439
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 12.0
Casing Diameter: 2.0
Casing Diameter UOM: Inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008269609
Layer: 1
Slot: 10
Screen Top Depth: 12.0
Screen End Depth: 22.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch
Screen Diameter: 2.375

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008269875
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:

Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1008269055
Diameter:	4.25
Depth From:	0.0
Depth To:	22.0
Hole Depth UOM:	ft
Hole Diameter UOM:	Inch

Links

Bore Hole ID:	1008221259	**Tag No:**	A250056
Depth M:	6.7056	**Contractor:**	7644
Year Completed:	2018	**Latitude:**	43.3903793322134
Well Completed Dt:	07/17/2018	**Longitude:**	-79.7499569919717
Audit No:	Z289551	**Y:**	43.39037932991636
Path:	735\7355159.pdf	**X:**	-79.74995684325405

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38 | ***1 of 1*** | ***NE/194.3*** | ***107.8 / -1.76*** | ***. 677 Burloak Drive in Oakville lot 35 con 3 ON*** | ***WWIS***

Well ID:	7406503	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	12/22/2021
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	3XO46Y7R	**Contractor:**	7360
Tag:	A326046	**Form Version:**	9
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	035
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008894803	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601239.00
Code OB Desc:		**North83:**	4805317.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	12/03/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m

Remarks: ***Location Method:*** wwr
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 1008894930
Layer: 1
Color: 6
General Color: BROWN
Mat1: 01
Most Common Material: FILL
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 2.5
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008894931
Layer: 2
Color: 7
General Color: RED
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 2.5
Formation End Depth: 17.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895014
Layer: 1
Plug From:
Plug To:
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895036
Layer: 1
Plug From: 1.0
Plug To: 8.0
Plug Depth UOM: ft

Method of Construction & Well

Use

Method Construction ID: 1008894883
Method Construction Code: E
Method Construction: Auger
Other Method Construction:

Pipe Information

Pipe ID: 1008894837
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008894960
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 7.0
Casing Diameter: 2.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1008894975
Layer: 1
Slot: 0.1
Screen Top Depth: 7.0
Screen End Depth: 17.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch
Screen Diameter: 2.25

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1008894838
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Water Details

Water ID: 1008894915
Layer: 1

Kind Code:	8
Kind:	Untested
Water Found Depth:	16.0
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1008894994
Diameter:	6.0
Depth From:	0.0
Depth To:	17.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1008894803	**Tag No:**	A326046
Depth M:	5.1816	**Contractor:**	7360
Year Completed:	2021	**Latitude:**	43.3938996457643
Well Completed Dt:	12/03/2021	**Longitude:**	-79.7499216689114
Audit No:	3XO46Y7R	**Y:**	43.39389964329711
Path:	740\7406503.pdf	**X:**	-79.74992152030153

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39 **1 of 1** **NE/195.7** **108.2 / -1.38** **ON** **WWIS**

Well ID:	7376612	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	12/31/2020
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z339877	**Contractor:**	7726
Tag:	A299155	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008558467	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601223.00
Code OB Desc:		**North83:**	4805330.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:		**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			

Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Links

Bore Hole ID:	1008558467	***Tag No:***	A299155
Depth M:		***Contractor:***	7726
Year Completed:		***Latitude:***	43.3940188351192
Well Completed Dt:		***Longitude:***	-79.7501167818949
Audit No:	Z339877	***Y:***	43.39401883234691
Path:		***X:***	-79.75011663251223

40 ***1 of 1*** ***W/199.4*** ***114.6 / 5.06*** ***ON*** ***WWIS***

Well ID:	7216932	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:		***Data Entry Status:***	Yes
Use 2nd:		***Data Src:***	
Final Well Status:		***Date Received:***	02/25/2014
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	C24321	***Contractor:***	7230
Tag:	A153734	***Form Version:***	8
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	10/11/2013
Year Completed:	2013
Depth (m):	
Latitude:	43.3925605743612
Longitude:	-79.7542831373088
Path:	

Bore Hole Information

Bore Hole ID:	1004715413	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	600888.00
Code OB Desc:		***North83:***	4805163.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	10/11/2013	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			

Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Links

Bore Hole ID:	1004715413	***Tag No:***	A153734
Depth M:		***Contractor:***	7230
Year Completed:	2013	***Latitude:***	43.3925605743612
Well Completed Dt:	10/11/2013	***Longitude:***	-79.7542831373088
Audit No:	C24321	***Y:***	43.39256057138675
Path:		***X:***	-79.75428298796069

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41 ***1 of 1*** ***E/200.8*** ***105.9 / -3.69*** ***. 677 Burloak Drive in Oakville lot 35 con 3 ON*** ***WWIS***

Well ID:	7406505	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Monitoring	***Data Entry Status:***	
Use 2nd:		***Data Src:***	
Final Well Status:	Observation Wells	***Date Received:***	12/22/2021
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	S3O7OCWN	***Contractor:***	7360
Tag:	A326048	***Form Version:***	9
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	035
Depth to Bedrock:		***Concession:***	03
Well Depth:		***Concession Name:***	DS S
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008894809	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	601362.00
Code OB Desc:		***North83:***	4805108.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	12/03/2021	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1008894935
Layer:	2

Color: 7
General Color: RED
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 2.5
Formation End Depth: 20.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1008894934
Layer: 1
Color: 6
General Color: BROWN
Mat1: 01
Most Common Material: FILL
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 2.5
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895038
Layer: 1
Plug From: 1.0
Plug To: 8.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895016
Layer: 1
Plug From:
Plug To:
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008894885
Method Construction Code: E
Method Construction: Auger
Other Method Construction:

Pipe Information

Pipe ID: 1008894841
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID:	1008894962
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1008894977
Layer:	1
Slot:	0.1
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1008894842
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1008894996
Diameter:	6.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1008894809	***Tag No:***	A326048
Depth M:	6.096	***Contractor:***	7360
Year Completed:	2021	***Latitude:***	43.3920015513748
Well Completed Dt:	12/03/2021	***Longitude:***	-79.7484419706719
Audit No:	S3O7OCWN	***Y:***	43.39200154870062
Path:	740\7406505.pdf	***X:***	-79.7484418222898

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
42	1 of 1	ENE/202.5	104.9 / -4.65	. 677 Burloak Drive in Oakville lot 35 con 3 ON	WWIS

Well ID:	7406502	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring	**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	12/22/2021
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	M3XPCAKU	**Contractor:**	7360
Tag:	A326045	**Form Version:**	9
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	035
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008894800	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601340.00
Code OB Desc:		**North83:**	4805230.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	12/03/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1008894929
Layer:	2
Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	2.5
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID: 1008894928
Layer: 1
Color: 6
General Color: BROWN
Mat1: 01
Most Common Material: FILL
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 2.5
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895035
Layer: 1
Plug From: 1.0
Plug To: 8.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1008895013
Layer: 1
Plug From:
Plug To:
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1008894882
Method Construction Code: E
Method Construction: Auger
Other Method Construction:

Pipe Information

Pipe ID: 1008894835
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1008894959
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID:	1008894974
Layer:	1
Slot:	0.1
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1008894836
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Water Details

Water ID:	1008894914
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	16.0
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1008894993
Diameter:	6.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1008894800	**Tag No:**	A326045
Depth M:	6.096	**Contractor:**	7360
Year Completed:	2021	**Latitude:**	43.3931028064914
Well Completed Dt:	12/03/2021	**Longitude:**	-79.7486909505667
Audit No:	M3XPCAKU	**Y:**	43.39310280378241
Path:	740\7406502.pdf	**X:**	-79.74869080187335

43	1 of 1	SE/202.7	106.5 / -3.07	ON	BORE

Borehole ID:	891025	**Inclin FLG:**	No

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

OGF ID:	215583867	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	23-JAN-1984	**Municipality:**	
Static Water Level:		**Lot:**	LOT 1
Primary Water Use:		**Township:**	NELSON
Sec. Water Use:		**Latitude DD:**	43.390227
Total Depth m:	5	**Longitude DD:**	-79.750059
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	601234
Drill Method:	Solid stem auger	**Northing:**	4804909
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	107		

Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway
Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID:	8503582	**Mat Consistency:**	Hard
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	2	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silty	**Geologic Group:**	
Material 3:	Shaly	**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Red silty clay (CL) occ. Shaley layers hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503581	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503583	**Mat Consistency:**	
Top Depth:	2	**Material Moisture:**	
Bottom Depth:	5	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Weathered sound. Bedrock Queenston Formation. Red shale **Note: Many records provided by the department have a truncated Stratum Description] field.

44	1 of 1	NNW/204.2	113.2 / 3.66	**3529, 3537 and 3543 Wyecroft Road Oakville ON L6L 0B6**	EHS

Order No:	23050301065	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Report Date:	12-MAY-23	**Search Radius (km):**	.25
Date Received:	03-MAY-23	**X:**	-79.75242643
Previous Site Name:		**Y:**	43.39425824
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory		

45 **1 of 4** **WNW/206.8** **114.8 / 5.30** **926 BURLOAK DR Burlington ON** **WWIS**

Well ID:	7246266	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Abandoned-Other	**Date Received:**	08/10/2015
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z214743	**Contractor:**	7472
Tag:	A153734	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	11.1
Latitude:	43.392535718931
Longitude:	-79.7544812049603
Path:	

Bore Hole Information

Bore Hole ID:	1005550158	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600872.00
Code OB Desc:		**North83:**	4805160.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	07/16/2015	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock

Materials Interval

Formation ID:	1005684610
Layer:	1
Color:	
General Color:	
Mat1:	
Most Common Material:	
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	11.100000381469727
Formation End Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	1005684616
Method Construction Code:	
Method Construction:	
Other Method Construction:	

Pipe Information

Pipe ID:	1005684609
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1005684614
Layer:	
Material:	
Open Hole or Material:	
Depth From:	
Depth To:	
Casing Diameter:	
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1005684615
Layer:	
Slot:	
Screen Top Depth:	
Screen End Depth:	
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	cm
Screen Diameter:	

Water Details

Water ID:	1005684613
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	

Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005684611
Diameter: 21.0
Depth From: 0.0
Depth To: 2.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Hole Diameter

Hole ID: 1005684612
Diameter: 5.199999809265137
Depth From: 2.0
Depth To: 11.100000381469727
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID: 1005550158
Depth M: 11.1
Year Completed: 2015
Well Completed Dt: 07/16/2015
Audit No: Z214743
Path: 724\7246266.pdf
Tag No: A153734
Contractor: 7472
Latitude: 43.392535718931
Longitude: -79.7544812049603
Y: 43.39253571640381
X: -79.75448105564035

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45 **2 of 4** **WNW/206.8** **114.8 / 5.30** ***926 BURLOAK DR Burlington ON*** ***WWIS***

Well ID: 7246271
Construction Date:
Use 1st:
Use 2nd:
Final Well Status: Abandoned-Other
Water Type:
Casing Material:
Audit No: Z214748
Tag:
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: BURLINGTON CITY
Site Info:

PDF URL (Map):

Flowing (Y/N):
Flow Rate:
Data Entry Status:
Data Src:
Date Received: 08/10/2015
Selected Flag: TRUE
Abandonment Rec:
Contractor: 7472
Form Version: 7
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Additional Detail(s) (Map)

Well Completed Date: 07/16/2015
Year Completed: 2015
Depth (m): 9.2
Latitude: 43.3926252044541
Longitude: -79.7544299824213

Path:

Bore Hole Information

Bore Hole ID:	1005550183	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	600876.00
Code OB Desc:		***North83:***	4805170.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	07/16/2015	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1005684650
Layer:	1
Color:	
General Color:	
Mat1:	
Most Common Material:	
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	9.199999809265137
Formation End Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	1005684656
Method Construction Code:	
Method Construction:	
Other Method Construction:	

Pipe Information

Pipe ID:	1005684649
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1005684654
Layer:	
Material:	
Open Hole or Material:	
Depth From:	
Depth To:	
Casing Diameter:	

Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684655
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID: 1005684653
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005684652
Diameter: 5.199999809265137
Depth From: 2.0
Depth To: 9.199999809265137
Hole Depth UOM: m
Hole Diameter UOM: cm

Hole Diameter

Hole ID: 1005684651
Diameter: 21.0
Depth From: 0.0
Depth To: 2.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID: 1005550183
Depth M: 9.2
Year Completed: 2015
Well Completed Dt: 07/16/2015
Audit No: Z214748
Path: 724\7246271.pdf
Tag No:
Contractor: 7472
Latitude: 43.3926252044541
Longitude: -79.7544299824213
Y: 43.39262520176714
X: -79.75442983281295

45 ***3 of 4*** ***WNW/206.8*** ***114.8 / 5.30*** ***C & M McNally Engineering Corp.***
926 Burloak Drive
Burlington ON L7L0B1 ***GEN***

Generator No: ON2704360
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
45	4 of 4	WNW/206.8	114.8 / 5.30	C & M McNally Engineering Corp. 926 Burloak Drive Burlington ON L7L0B1	GEN

Generator No: ON2704360
SIC Code: 237110
SIC Description: WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
46	1 of 7	W/210.0	113.9 / 4.33	HADRIAN MANUFACTURING INC. 945 SYSCON ROAD BURLINGTON CITY ON L7L 5S3	CA

Certificate #: 8-3511-97-
Application Year: 97
Issue Date: 12/16/1997
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: STACK FOR POWDER PAINT COATING EMISSIONS
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
46	2 of 7	W/210.0	113.9 / 4.33	THORCO MANUFACTURING LTD. 945 SYSCON RD BURLINGTON ON L7L 5S3	SCT

Established: 1964
Plant Size (ft²): 35000
Employment: 25

--Details--
Description: OFFICE & STORE FIXTURES, SHELVING, EXCEPT WOOD
SIC/NAICS Code: 2542

Description: FABRICATED PLATE WORK (BOILER SHOPS)
SIC/NAICS Code: 3443

Description: SHEET METAL WORK
SIC/NAICS Code: 3444

Description: METAL STAMPINGS, N.E.C.
SIC/NAICS Code: 3469

Description: INDUSTRIAL & COMMERCIAL MACHINERY & EQUIPMENT, N.E.C.
SIC/NAICS Code: 3599

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46 ***3 of 7*** ***W/210.0*** ***113.9 / 4.33*** ***THORCO MANUFACTURING LTD.*** ***945 SYSCON ROAD*** ***BURLINGTON ON L7L 5S3*** ***GEN***

Generator No: ON0382901
SIC Code: 3049
SIC Description: OTHER STAMPED METAL
Approval Years: 93,94,95,96,97,98,99,00
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

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46 ***4 of 7*** ***W/210.0*** ***113.9 / 4.33*** ***THORCO MANU(OUT OF BUSINESS)*** ***945 SYSCON ROAD*** ***BURLINGTON ON L7L 5S3*** ***GEN***

Generator No: ON0382901
SIC Code: 3049
SIC Description: OTHER STAMPED METAL

Approval Years: 01
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

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46 ***5 of 7*** ***W/210.0*** ***113.9 / 4.33*** ***HADRIAN MANUFACTURING INC.***
945 SYSCON ROAD
BURLINGTON ON L7L 5S3 ***GEN***

Generator No: ON1647701
SIC Code: 4222
SIC Description: FORM WORK
Approval Years: 01
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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46 ***6 of 7*** ***W/210.0*** ***113.9 / 4.33*** ***945 Syscon Rd***
Burlington ON L7L 5S3 ***EHS***

Order No: 20100930011
Status: C
Report Type: Custom Report
Report Date: 10/8/2010
Date Received: 9/30/2010
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.754158
Y: 43.392538

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

46 | **7 of 7** | **W/210.0** | **113.9 / 4.33** | **1202248 Ontario Limited**
945 SYSCON RD, BURLINGTON, ON, L7L 5S2
ON L7L 5S3 | **RSC**

RSC ID:	107915	**Cert Date:**	6-Apr-11
RA No:		**Cert Prop Use No:**	No CPU
RSC Type:		**Intended Prop Use:**	Industrial
Curr Property Use:	Industrial	**Qual Person Name:**	James D. Peters
Ministry District:	BURLINGTON	**Stratified (Y/N):**	
Filing Date:	16-Jun-11	**Audit (Y/N):**	
Date Ack:		**Entire Leg Prop. (Y/N):**	No
Date Returned:		**Accuracy Estimate:**	11 to 20 meters
Restoration Type:		**Telephone:**	905-3330300x2018
Soil Type:		**Fax:**	905-3331841
Criteria:		**Email:**	jpeters@hadrian-inc.com
CPU Issued Sect 1686:	No		

Asmt Roll No: 2.40209E+14
Prop ID No (PIN): Entire PIN: 07015-0006
Property Municipal Address: 945 SYSCON RD, BURLINGTON, ON, L7L 5S2
Mailing Address: 965 Syscon Road, Burlington, Ontario, L7L 5S3
Latitude & Latitude: 43.39274990N 79.75430400W (converted from UTM)
UTM Coordinates: NAD83 17-600886-4805184
Consultant:
Legal Desc: Entire Legal Description: Parcel 6-1, Section M-188, being Lot 6, Plan M-188, City of Burlington, Regional Municipality of Halton. RSC Legal Description: Parts 1, 2 and 3 on Plan 20R-18942; Burlington
Measurement Method: Digitized from a satellite image
Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Industrial/Commercial/Community property use
RSC PDF:

47 | **1 of 2** | **SE/219.9** | **106.5 / -3.09** | **CANADIAN NATIONAL RAILWAY**
CN TRACKS NEAR BURLOAK DR. TRAIN
OAKVILLE TOWN ON | **SPL**

Ref No:	2115	**Municipality No:**	14403
Year:		**Nature of Damage:**	
Incident Dt:	4/5/1988	**Discharger Report:**	
Dt MOE Arvl on Scn:		**Material Group:**	
MOE Reported Dt:	4/5/1988	**Health/Env Conseq:**	
Dt Document Closed:		**Agency Involved:**	
Site No:			
Facility Name:			
MOE Response:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:			
Easting:			
Incident Cause:	PIPE/HOSE LEAK		
Incident Event:			
Environment Impact:			
Nature of Impact:			

Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: MATERIAL FAILURE
Incident Summary: CN RAIL - ENGINE LEAKED 675 L TO TRACK BED.
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

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47 | ***2 of 2*** | ***SE/219.9*** | ***106.5 / -3.09*** | ***Burloak and CN Rail Burlington ON*** | ***EHS***

Order No:	20030612005	***Nearest Intersection:***	see map
Status:	C	***Municipality:***	
Report Type:	Basic Report	***Client Prov/State:***	ON
Report Date:	6/23/03	***Search Radius (km):***	0.30
Date Received:	6/13/03	***X:***	-79.74974
Previous Site Name:		***Y:***	43.390203
Lot/Building Size:	Plan 20M-582		
Additional Info Ordered:			

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48 | ***1 of 1*** | ***SE/220.1*** | ***106.4 / -3.10*** | ***ON*** | ***BORE***

Borehole ID:	891030	***Inclin FLG:***	No
OGF ID:	215583872	***SP Status:***	Initial Entry
Status:	Decommissioned	***Surv Elev:***	No
Type:	Borehole	***Piezometer:***	No
Use:	Geotechnical/Geological Investigation	***Primary Name:***	
Completion Date:	25-JAN-1984	***Municipality:***	
Static Water Level:		***Lot:***	LOT 35
Primary Water Use:		***Township:***	TRAFALGAR
Sec. Water Use:		***Latitude DD:***	43.390463
Total Depth m:	4.5	***Longitude DD:***	-79.749363
Depth Ref:	Ground Surface	***UTM Zone:***	17
Depth Elev:		***Easting:***	601290
Drill Method:	Solid stem auger	***Northing:***	4804936
Orig Ground Elev m:	105	***Location Accuracy:***	
Elev Reliabil Note:		***Accuracy:***	Within 10 metres
DEM Ground Elev m:	107		

Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway
Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID: 8503596 ***Mat Consistency:***

Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.5	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	Fill-Misc
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:	Clay	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: Topsoil and clay (fill) **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503597	**Mat Consistency:**	Firm
Top Depth:	.5	**Material Moisture:**	
Bottom Depth:	1.6	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silty	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: Red silty clay (CL) firm to hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503598	**Mat Consistency:**	
Top Depth:	1.6	**Material Moisture:**	
Bottom Depth:	4.5	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: Weathered sound. Bedrock Queenston formation red shale **Note: Many records provided by the department have a truncated Stratum Description] field.

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49 | ***1 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***Aero-Kit Industries Inc.*** ***5499 Harvester Rd*** ***Burlington ON L7L 5V4*** | ***SCT***

Established: 01-JUL-78
Plant Size (ft²): 20000
Employment:

--Details--
Description: Motor Vehicle Seating and Interior Trim Manufacturing
SIC/NAICS Code: 336360

Description: All Other Plastic Product Manufacturing
SIC/NAICS Code: 326198

Description: Textile Bag and Canvas Mills
SIC/NAICS Code: 314910

Description: Other New Motor Vehicle Parts and Accessories Wholesaler-Distributors
SIC/NAICS Code: 415290

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49 | ***2 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED*** ***5499 HARVESTER ROAD*** ***BURLINGTON ON L7L 5J7*** | ***GEN***

Generator No: ON5020955
SIC Code: 484121
SIC Description: General Freight Trucking Long Distance Truck-Load

Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

---

49 | ***3 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON L7L 5J7 | ***GEN***

Generator No: ON5020955
SIC Code: 484121
SIC Description: General Freight Trucking Long Distance Truck-Load
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

---

49 | ***4 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON L7L 5J7 | ***GEN***

Generator No: ON5020955
SIC Code: 484121
SIC Description: General Freight Trucking Long Distance Truck-Load
Approval Years: 2011
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

---

49 | ***5 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON L7L 5J7 | ***GEN***

Generator No: ON5020955
SIC Code: 484121
SIC Description: General Freight Trucking Long Distance Truck-Load
Approval Years: 2012
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

---

49 | ***6 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON | ***GEN***

Generator No: ON5020955
SIC Code: 484121
SIC Description: GENERAL FREIGHT TRUCKING, LONG DISTANCE, TRUCK-LOAD
Approval Years: 2013
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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49 | ***7 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***Load Covering Solutions***
5499 Harvester Road
Burlington ON L7L 5J7 | ***GEN***

Generator No: ON5760582
SIC Code: 336990

SIC Description:	OTHER TRANSPORTATION EQUIPMENT MANUFACTURING
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES

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49 | ***8 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON L7L5V4 | ***GEN***

Generator No:	ON5020955
SIC Code:	484121
SIC Description:	GENERAL FREIGHT TRUCKING, LONG DISTANCE, TRUCK-LOAD
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	THOMAS J LAW
Choice of Contact:	CO_ADMIN
Phone No Admin:	905-681-3077 Ext.202
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES

---

49 | ***9 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD
BURLINGTON ON L7L5V4 | ***GEN***

Generator No:	ON5020955
SIC Code:	484121
SIC Description:	GENERAL FREIGHT TRUCKING, LONG DISTANCE, TRUCK-LOAD
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	THOMAS J LAW
Choice of Contact:	CO_ADMIN
Phone No Admin:	905-681-3077 Ext.202
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

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49 | **10 of 14** | **WSW/222.3** | **111.8 / 2.25** | **J. SYVRET AND CO. LIMITED**
5499 HARVESTER ROAD
BURLINGTON ON L7L5V4 | **GEN**

Generator No: ON5020955
SIC Code: 484121
SIC Description: GENERAL FREIGHT TRUCKING, LONG DISTANCE, TRUCK-LOAD
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin: THOMAS J LAW
Choice of Contact: CO_ADMIN
Phone No Admin: 905-681-3077 Ext.202
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

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49 | **11 of 14** | **WSW/222.3** | **111.8 / 2.25** | **Load Covering Solutions**
5499 Harvester Road
Burlington ON L7L 5J7 | **GEN**

Generator No: ON5760582
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

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49 | **12 of 14** | **WSW/222.3** | **111.8 / 2.25** | **J. SYVRET AND CO. LIMITED**
5499 HARVESTER ROAD
BURLINGTON ON L7L5V4 | **GEN**

Generator No: ON5020955
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 213 T
Waste Class Name: Petroleum distillates

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49 | ***13 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***J. SYVRET AND CO. LIMITED***
5499 HARVESTER ROAD Unit B
BURLINGTON ON L7L5V4 | ***GEN***

Generator No: ON5020955
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 213 T
Waste Class Name: Petroleum distillates

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49 | ***14 of 14*** | ***WSW/222.3*** | ***111.8 / 2.25*** | ***Load Covering Solutions***
5499 Harvester Road
Burlington ON L7L 5J7 | ***GEN***

Generator No: ON5760582
SIC Code:
SIC Description:
Approval Years: As of Oct 2019
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 265 L
Waste Class Name: Graphic arts wastes

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

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50 *1 of 1* *SE/222.8* *106.1 / -3.45* *ON* ***BORE***

Borehole ID: 891024
OGF ID: 215583866
Status: Decommissioned
Type: Borehole
Use: Geotechnical/Geological Investigation
Completion Date: 24-JAN-1984
Static Water Level: 0.5
Primary Water Use:
Sec. Water Use:
Total Depth m: 9.5
Depth Ref: Ground Surface
Depth Elev:
Drill Method: Solid stem auger
Orig Ground Elev m: 105
Elev Reliabil Note:
DEM Ground Elev m: 107
Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway
Survey D:
Comments:

Inclin FLG: No
SP Status: Initial Entry
Surv Elev: No
Piezometer: No
Primary Name:
Municipality:
Lot: LOT 35
Township: TRAFALGAR
Latitude DD: 43.390329
Longitude DD: -79.749489
UTM Zone: 17
Easting: 601280
Northing: 4804921
Location Accuracy:
Accuracy: Within 10 metres

Borehole Geology Stratum

Geology Stratum ID: 8503578
Top Depth: .2
Bottom Depth: 2
Material Color: Red
Material 1: Clay
Material 2: Silty
Material 3: Shaly
Material 4:
Gsc Material Description:
Stratum Description: Red silty clay (CL) occ. Shaley layers stiff to hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Mat Consistency: Stiff
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 8503579
Top Depth: 2
Bottom Depth: 9.5
Material Color: Red
Material 1: Bedrock
Material 2: Shale
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: Weathered Sound. Bedrock Queenston Formation Red shale. Weathered zone.

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 8503577
Top Depth: 0
Bottom Depth: .2
Material Color:
Material 1: Topsoil
Material 2:

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:

Material 3: **Geologic Period:**
Material 4: **Depositional Gen:**
Gsc Material Description:
Stratum Description: Topsoil **Note: Many records provided by the department have a truncated Stratum Description] field.

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51 | **1 of 1** | **WNW/226.3** | **114.8 / 5.30** | **926 BURLOAK DR Burlington ON** | **WWIS**

Well ID:	7246267	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	
Use 2nd:		**Data Src:**	
Final Well Status:	Abandoned-Other	**Date Received:**	08/10/2015
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z214744	**Contractor:**	7472
Tag:	A101098	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	07/16/2015
Year Completed:	2015
Depth (m):	6.1
Latitude:	43.3929498265079
Longitude:	-79.7544727231229
Path:	

Bore Hole Information

Bore Hole ID:	1005550161	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600872.00
Code OB Desc:		**North83:**	4805206.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	07/16/2015	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID: 1005684618
Layer: 1
Color:
General Color:
Mat1:
Most Common Material:
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 6.099999904632568
Formation End Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1005684624
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 1005684617
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1005684622
Layer:
Material:
Open Hole or Material:
Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005684623
Layer:
Slot:
Screen Top Depth:
Screen End Depth:
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Water Details

Water ID: 1005684621
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: m

Hole Diameter

Hole ID:	1005684620
Diameter:	5.199999809265137
Depth From:	2.0
Depth To:	6.099999904632568
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Hole Diameter

Hole ID:	1005684619
Diameter:	21.0
Depth From:	0.0
Depth To:	2.0
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	1005550161	***Tag No:***	A101098
Depth M:	6.1	***Contractor:***	7472
Year Completed:	2015	***Latitude:***	43.3929498265079
Well Completed Dt:	07/16/2015	***Longitude:***	-79.7544727231229
Audit No:	Z214744	***Y:***	43.392949824596755
Path:	724\7246267.pdf	***X:***	-79.75447257371384

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52 ***1 of 1*** ***SE/226.3*** ***106.0 / -3.52*** ***ON*** ***BORE***

Borehole ID:	891023	***Inclin FLG:***	No
OGF ID:	215583865	***SP Status:***	Initial Entry
Status:	Decommissioned	***Surv Elev:***	No
Type:	Borehole	***Piezometer:***	No
Use:	Geotechnical/Geological Investigation	***Primary Name:***	
Completion Date:	20-JAN-1984	***Municipality:***	
Static Water Level:	0.3	***Lot:***	LOT 1
Primary Water Use:		***Township:***	NELSON
Sec. Water Use:		***Latitude DD:***	43.390151
Total Depth m:	12.9	***Longitude DD:***	-79.749702
Depth Ref:	Ground Surface	***UTM Zone:***	17
Depth Elev:		***Easting:***	601263
Drill Method:	Solid stem auger	***Northing:***	4804901
Orig Ground Elev m:	105	***Location Accuracy:***	
Elev Reliabil Note:		***Accuracy:***	Within 10 metres
DEM Ground Elev m:	107		
Concession:	CON 3 SOUTH OF DUNDAS ST		
Location D:	Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway		
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	8503575	***Mat Consistency:***	Hard
Top Depth:	.5	***Material Moisture:***	
Bottom Depth:	1.9	***Material Texture:***	
Material Color:	Red	***Non Geo Mat Type:***	
Material 1:	Clay	***Geologic Formation:***	
Material 2:	Silty	***Geologic Group:***	
Material 3:	Shale	***Geologic Period:***	
Material 4:		***Depositional Gen:***	

Gsc Material Description:
Stratum Description: Red silty clay (CL) occ. Shaley layers hard.

Geology Stratum ID:	8503576	**Mat Consistency:**	
Top Depth:	1.9	**Material Moisture:**	
Bottom Depth:	12.9	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: Weathered, sound. Bedrock Queenston Formation Red shale. Weathered zone **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503574	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.2	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	Fill-Misc
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:	Clay	**Geologic Group:**	
Material 3:	Silty	**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: Topsoil & silty clay (fill) **Note: Many records provided by the department have a truncated Stratum Description] field.

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53 **1 of 1** **WNW/226.8** **114.8 / 5.30** **ON** **WWIS**

Well ID:	7161240	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	04/04/2011
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	M08431	**Contractor:**	6607
Tag:	A101098	**Form Version:**	5
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/716\7161240.pdf

Additional Detail(s) (Map)

Well Completed Date:	02/08/2011
Year Completed:	2011
Depth (m):	
Latitude:	43.3929140860823
Longitude:	-79.7544981501368
Path:	716\7161240.pdf

Bore Hole Information

Bore Hole ID:	1003492970	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600870.00
Code OB Desc:		**North83:**	4805202.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	02/08/2011	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1003492970	**Tag No:**	A101098
Depth M:		**Contractor:**	6607
Year Completed:	2011	**Latitude:**	43.3929140860823
Well Completed Dt:	02/08/2011	**Longitude:**	-79.7544981501368
Audit No:	M08431	**Y:**	43.392914083533555
Path:	716\7161240.pdf	**X:**	-79.75449800052303

54 ***1 of 1*** ***SE/228.2*** ***105.9 / -3.65*** ***ON*** **BORE**

Borehole ID:	891022	**Inclin FLG:**	No
OGF ID:	215583864	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	23-JAN-1984	**Municipality:**	
Static Water Level:		**Lot:**	LOT 1
Primary Water Use:		**Township:**	NELSON
Sec. Water Use:		**Latitude DD:**	43.390063
Total Depth m:	3.9	**Longitude DD:**	-79.749828
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	601253
Drill Method:	Solid stem auger	**Northing:**	4804891
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	107		
Concession:	CON 3 SOUTH OF DUNDAS ST		
Location D:	Foundation Investigation report for W.O. 82-26025. District 4 Hamilton. GO-ALRT, West Extension, Oakville Project. Burloak Drive CNR Subway. Burloak Drive GO-ALRT Subway		
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	8503572	**Mat Consistency:**	Hard
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	.5	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silty	**Geologic Group:**	
Material 3:	Shaly	**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Red Silty clay (Cl) occ. Shaley layers hard **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503571	**Mat Consistency:**	Soft
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	Fill-Misc
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:	Clay	**Geologic Group:**	
Material 3:	Silty	**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:

Stratum Description: Topsoil and silty clay (fill) soft to firm **Note: Many records provided by the department have a truncated Stratum Description] field.

Geology Stratum ID:	8503573	**Mat Consistency:**	
Top Depth:	1.7	**Material Moisture:**	
Bottom Depth:	3.9	**Material Texture:**	
Material Color:	Red	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:

Stratum Description: Bedrock Queenston Formation, Red shale weathered sound **Note: Many records provided by the department have a truncated Stratum Description] field.

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55 | **1 of 1** | **WNW/228.8** | **114.8 / 5.30** | **926 BURLOAK Burlington ON** | **WWIS**

Well ID:	7254120	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:	0	**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	12/14/2015
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z219979	**Contractor:**	6607
Tag:	A192740	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/725\7254120.pdf

Additional Detail(s) (Map)

Well Completed Date:	09/28/2015
Year Completed:	2015
Depth (m):	9.1
Latitude:	43.3929412275594
Longitude:	-79.7545099417127
Path:	725\7254120.pdf

Bore Hole Information

Bore Hole ID:	1005834465	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	600869.00
Code OB Desc:		**North83:**	4805205.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	09/28/2015	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1005892869
Layer:	3
Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	2.700000047683716
Formation End Depth:	9.100000381469727
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	1005892868
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	34
Mat2 Desc:	TILL
Mat3:	
Mat3 Desc:	
Formation Top Depth:	1.5
Formation End Depth:	2.700000047683716
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	1005892867
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	

Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 1.5
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1005892877
Layer: 1
Plug From: 0.0
Plug To: 0.30000001192092896
Plug Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1005892878
Layer: 2
Plug From: 0.30000001192092896
Plug To: 5.599999904632568
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1005892876
Method Construction Code: 6
Method Construction: Boring
Other Method Construction:

Pipe Information

Pipe ID: 1005892866
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1005892872
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 6.0
Casing Diameter: 5.099999904632568
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1005892873
Layer: 1
Slot: 10
Screen Top Depth: 6.0
Screen End Depth: 9.100000381469727
Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

Screen Diameter: 6.400000095367432

Water Details

Water ID: 1005892871
Layer: 1
Kind Code:
Kind:
Water Found Depth: 6.0
Water Found Depth UOM: m

Hole Diameter

Hole ID: 1005892870
Diameter: 21.0
Depth From: 0.0
Depth To: 9.100000381469727
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID: 1005834465
Depth M: 9.1
Year Completed: 2015
Well Completed Dt: 09/28/2015
Audit No: Z219979
Path: 725\7254120.pdf
Tag No: A192740
Contractor: 6607
Latitude: 43.3929412275594
Longitude: -79.7545099417127
Y: 43.39294122567358
X: -79.75450979270163

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56 *1 of 1* *WSW/230.8* *110.5 / 0.97* *ON* *WWIS*

Well ID: 7194720
Construction Date:
Use 1st:
Use 2nd:
Final Well Status:
Water Type:
Casing Material:
Audit No: C19051
Tag: A134140
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: BURLINGTON CITY
Site Info:

Flowing (Y/N):
Flow Rate:
Data Entry Status: Yes
Data Src:
Date Received: 01/07/2013
Selected Flag: TRUE
Abandonment Rec:
Contractor: 6607
Form Version: 8
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 09/13/2012
Year Completed: 2012
Depth (m):
Latitude: 43.3908936622022
Longitude: -79.7541814651927

Path:

Bore Hole Information

Bore Hole ID:	1004230871	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	600899.00
Code OB Desc:		***North83:***	4804978.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	09/13/2012	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1004230871	***Tag No:***	A134140
Depth M:		***Contractor:***	6607
Year Completed:	2012	***Latitude:***	43.3908936622022
Well Completed Dt:	09/13/2012	***Longitude:***	-79.7541814651927
Audit No:	C19051	***Y:***	43.3908936598085
Path:		***X:***	-79.75418131591687

---

57 ***1 of 1*** ***SE/231.2*** ***106.0 / -3.59*** ***ON*** ***WWIS***

Well ID:	7372336	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:		***Data Entry Status:***	Yes
Use 2nd:		***Data Src:***	
Final Well Status:		***Date Received:***	11/05/2020
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z347923	***Contractor:***	7644
Tag:	A297561	***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	BURLINGTON CITY		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008507744	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	601272.00
Code OB Desc:		***North83:***	4804902.00
Open Hole:		***Org CS:***	UTM83

Cluster Kind:		**UTMRC:**	4
Date Completed:	09/23/2020	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008507744	**Tag No:**	A297561
Depth M:		**Contractor:**	7644
Year Completed:	2020	**Latitude:**	43.390159227403
Well Completed Dt:	09/23/2020	**Longitude:**	-79.7495911085335
Audit No:	Z347923	**Y:**	43.39015922477962
Path:	737\7372336.pdf	**X:**	-79.74959095957428

---

58 | ***1 of 1*** | ***ESE/241.7*** | ***105.9 / -3.68*** | ***Burloak Road Oakville ON*** | ***EHS***

Order No:	20110603036	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Site Report	**Client Prov/State:**	ON
Report Date:	6/6/2011	**Search Radius (km):**	0.25
Date Received:	6/3/2011 3:41:42 PM	**X:**	-79.748617
Previous Site Name:		**Y:**	43.39084
Lot/Building Size:			
Additional Info Ordered:			

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59 | ***1 of 1*** | ***SSE/242.4*** | ***105.8 / -3.71*** | ***lot 1 con 3 ON*** | ***WWIS***

Well ID:	7385454	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	04/28/2021
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z360389	**Contractor:**	7644
Tag:	A312098	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	001
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	BURLINGTON CITY		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008648924	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601240.00

Code OB Desc:		**North83:**	4804866.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	03/31/2021	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008648924	**Tag No:**	A312098
Depth M:		**Contractor:**	7644
Year Completed:	2021	**Latitude:**	43.3898394624598
Well Completed Dt:	03/31/2021	**Longitude:**	-79.7499927824753
Audit No:	Z360389	**Y:**	43.38983945954035
Path:	738\7385454.pdf	**X:**	-79.74999263306924

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60 ***1 of 2*** ***W/252.6*** ***114.8 / 5.28*** ***945 Syscon Road Burlington ON L7L 5S3*** ***EHS***

Order No:	20191212224	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	19-DEC-19	**Search Radius (km):**	.25
Date Received:	12-DEC-19	**X:**	-79.7549708
Previous Site Name:		**Y:**	43.3919712
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

---

60 ***2 of 2*** ***W/252.6*** ***114.8 / 5.28*** ***945 Syscon Road Burlington ON L7L 5S3*** ***EHS***

Order No:	20191212224	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	19-DEC-19	**Search Radius (km):**	.25
Date Received:	12-DEC-19	**X:**	-79.7549708
Previous Site Name:		**Y:**	43.3919712
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

---

61 ***1 of 11*** ***SW/257.5*** ***109.0 / -0.51*** ***SSI EQUIPMENT INC. 5470 HARVESTER RD BURLINGTON ON L7L 5N5*** ***SCT***

Established:	1991
Plant Size (ft²):	10000
Employment:	25

--Details--

Description:	Other Plate Work and Fabricated Structural Product Manufacturing
SIC/NAICS Code:	332319
Description:	Metal Valve Manufacturing
SIC/NAICS Code:	332910

Description: All Other General-Purpose Machinery Manufacturing
SIC/NAICS Code: 333990

---

61 **2 of 11** **SW/257.5** **109.0 / -0.51** **5470 Harvester Rd**
Burlington ON L7L 5N5 **EHS**

Order No: 20040119008
Status: C
Report Type: Complete Report
Report Date: 1/28/04
Date Received: 1/19/04
Previous Site Name:
Lot/Building Size: 30,000
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Nearest Intersection: HARVESTER AND BURLOAK
Municipality:
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.754027
Y: 43.390075

---

61 **3 of 11** **SW/257.5** **109.0 / -0.51** **SSI Equipment**
5470 Harvester Rd.
Burlington ON L7L 5N5 **GEN**

Generator No: ON1358908
SIC Code: 339990
SIC Description: All Other Miscellaneous Manufacturing
Approval Years: 04
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

---

61 **4 of 11** **SW/257.5** **109.0 / -0.51** **Otto Bock Healthcare Canada**
5470 Harvester Rd
Burlington ON L7L 5N5 **SCT**

Established: 01-AUG-93
Plant Size (ft²):
Employment:

--Details--
Description: Medical Equipment and Supplies Manufacturing
SIC/NAICS Code: 339110

Description: Medical Equipment and Supplies Manufacturing
SIC/NAICS Code: 339110

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61 **5 of 11** **SW/257.5** **109.0 / -0.51** **Otto Bock Healthcare**
5470 Harvester Rd
Burlington ON L7L 5N5 **GEN**

Generator No: ON3786204
SIC Code: 323119
SIC Description: OTHER PRINTING
Approval Years: 2016
PO Box No:
Country: Canada
Status:

Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

---

61 | ***6 of 11*** | ***SW/257.5*** | ***109.0 / -0.51*** | ***Otto Bock Healthcare 5470 Harvester Rd Burlington ON L7L 5N5*** | ***GEN***

Generator No: ON3786204
SIC Code: 323119
SIC Description: OTHER PRINTING
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

---

61 | ***7 of 11*** | ***SW/257.5*** | ***109.0 / -0.51*** | ***Otto Bock Healthcare 5470 Harvester Rd Burlington ON L7L 5N5*** | ***GEN***

Generator No: ON3786204
SIC Code: 323119
SIC Description: OTHER PRINTING
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

---

61 ***8 of 11*** ***SW/257.5*** ***109.0 / -0.51*** ***Otto Bock Healthcare 5470 Harvester Rd Burlington ON L7L 5N5*** ***GEN***

Generator No: ON3786204
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145 H
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 232 L
Waste Class Name: Polymeric resins

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

---

61 ***9 of 11*** ***SW/257.5*** ***109.0 / -0.51*** ***Otto Bock Healthcare 5470 Harvester Rd Burlington ON L7L 5N5*** ***GEN***

Generator No: ON3786204
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

Waste Class: 145 H
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 232 L
Waste Class Name: Polymeric resins

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

---

61 | **10 of 11** | **SW/257.5** | **109.0 / -0.51** | **Otto Bock Healthcare**
5470 Harvester Rd
Burlington ON L7L 5N5 | **GEN**

Generator No: ON3786204
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 232 L
Waste Class Name: Polymeric resins

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 145 H
Waste Class Name: Wastes from the use of pigments, coatings and paints

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61 | **11 of 11** | **SW/257.5** | **109.0 / -0.51** | **Otto Bock Healthcare**
5470 Harvester Rd
Burlington ON L7L 5N5 | **GEN**

Generator No: ON3786204
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 331 I
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145 H
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 232 L
Waste Class Name: POLYMERIC RESINS

Waste Class: 145 L
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 145 I
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

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62 | **1 of 1** | **ESE/266.2** | **105.8 / -3.70** | **n/a, Oakville ON** | **EHS**

Order No: 20171121164
Status: C
Report Type: Custom Report
Report Date: 05-DEC-17
Date Received: 21-NOV-17
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.748481
Y: 43.390608

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63 | **1 of 16** | **SSW/283.8** | **107.3 / -2.25** | **A. CAPOBIANCO & SONS LTD., 850 SYSCON COURT, BURLINGTON CITY ON L7L 6C5** | **CA**

Certificate #: 8-3239-91-
Application Year: 91
Issue Date: 2/12/1992
Approval Type: Industrial air
Status: Approved in 1992
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: CONSTRUCT HOT ASPHALT PAVING PLANT
Contaminants: Suspended Particulate Matter, Nitrogen Oxides
Emission Control:

---

63 | **2 of 16** | **SSW/283.8** | **107.3 / -2.25** | **Associated Paving & Materials Ltd, 850 Syscon Ct., Burlington ON L7L 6C5** | **CONV**

File No: 032204
Crown Brief No:
Court Location:
Publication City:
Publication Title:
Act:
Act(s):
First Matter:
Second Matter:
Investigation 1:
Investigation 2:
Penalty Imposed:

Location:
Region:
Ministry District:

Description: Associated Paving & Materials Ltd has been fined $8,000, plus a victim fine surcharge, for violating the Environmental Protection Act (EPA). Associated Paving & Materials Ltd operates a hot-mix asphalt plant at 850 Syscon Ct. in Burlington. On June 10, 2003, the Ministry of the Environment responded to a complaint that a grey cloud of particulate emissions discharging from the defendant's plant, covered several parked cars in an adjacent

lot, with a dusty material. This matter was referred to the ministry's Investigations and Enforcement Branch and the investigation confirmed the source to be dysfunctional dust collection equipment at Associated Paving's site. The dust was determined to be mineral dust which was abrasive with the capability of scouring car paint and windshields. As a result of the June 10, 2003 incident, Associated Paving & Materials was ordered to assess its emissions and undertake an abatement plan, which it has done. Associated Paving & Materials pleaded guilty to discharging a contaminant into the air to such an extent or degree as may cause damage to property, contrary to Section 6(d) of Ontario Regulation 346, made under the EPA and was fined $8,000, plus a victim fine surcharge.

Background:
URL:

Additional Details

Publication Date:
Count: 1
Act: EPA
Regulation: 346
Section: 6(d)
Act/Regulation/Section: EPA-346-6(d)
Date of Offence:
Date of Conviction:
Date Charged: 1/4/2006
Charge Disposition: Fine, victim fine surcharge
Fine: $8,000
Synopsis:

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63 | ***3 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***Associated Paving & Materials Ltd.***
850 Syscon Court Burlington Ontario L7L 6C5
Burlington
ON | ***EBR***

EBR Registry No: IA03E1447
Ministry Ref No: 0760-5SCLLW
Notice Type: Instrument Decision
Notice Stage:
Notice Date: August 15, 2008
Proposal Date: October 16, 2003
Year: 2003
Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Off Instrument Name:
Posted By:
Company Name: Associated Paving & Materials Ltd.
Site Address:
Location Other:
Proponent Name:
Proponent Address: 7886 Winston Churchill Blvd., Hornby Ontario, L0P 1E0
Comment Period:
URL:

Site Location Details:

850 Syscon Court Burlington Ontario L7L 6C5 Burlington

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63 | ***4 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***Associated Paving & Materials Ltd.***
850 Syscon Crt
Burlington ON L7L 6C5 | ***CA***

Certificate #: 7171-7DLQCV
Application Year: 2010
Issue Date: 5/31/2010
Approval Type: Air
Status: Approved
Application Type:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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63 | ***5 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***Associated Paving & Materials Ltd.***
850 Syscon Court
Burlington ON L7L 6C5 | ***CA***

Certificate #: 7171-7DLQCV
Application Year: 2008
Issue Date: 5/22/2008
Approval Type: Air
Status: Amended
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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63 | ***6 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***Associated Paving Company Ltd.***
850 Syscon Crt
Burlington ON L7L 6C5 | ***SCT***

Established: 01-NOV-66
Plant Size (ft²):
Employment:

--Details--
Description: All Other Specialty Trade Contractors
SIC/NAICS Code: 238990

Description: Asphalt Paving Mixture and Block Manufacturing
SIC/NAICS Code: 324121

Description: All Other Specialty Trade Contractors
SIC/NAICS Code: 238990

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63 | ***7 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***Associated Paving & Materials Ltd.***
850 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON
ON | ***EBR***

EBR Registry No: 011-2787
Ministry Ref No: 5285-8EEK5D
Notice Type: Instrument Decision
Notice Stage:
Notice Date: August 04, 2016
Proposal Date: March 04, 2011
Year: 2011
Instrument Type: (EPA Part II.1-air) - Environmental Compliance Approval (project type: air)
Off Instrument Name:
Posted By:
Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Company Name: Associated Paving & Materials Ltd.
Site Address:
Location Other:
Proponent Name:
Proponent Address: 5365 Munro Court, Burlington Ontario, Canada L7L 5M7
Comment Period:
URL:

Site Location Details:

850 Syscon Court Burlington, Regional Municipality of Halton L7L 6C5 CITY OF BURLINGTON

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63 **8 of 16** **SSW/283.8** **107.3 / -2.25** **850 Syscon Crt Burlington ON L7L6C5** **EHS**

Order No: 20150218017
Status: C
Report Type: Standard Report
Report Date: 24-FEB-15
Date Received: 18-FEB-15
Previous Site Name:
Lot/Building Size: 5.3 acres
Additional Info Ordered: City Directory
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.752882
Y: 43.388804

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63 **9 of 16** **SSW/283.8** **107.3 / -2.25** **Associated Paving & Materials Ltd. 850 Syscon Court Burlington ON** **ECA**

Approval No: 7171-7DLQCV
Approval Date: 2008-05-22
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
Approval Type: ECA-AIR
Project Type: AIR
Business Name: Associated Paving & Materials Ltd.
Address: 850 Syscon Court
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0760-5SCLLW-14.pdf
PDF Site Location:
MOE District: Halton-Peel
City:
Longitude: -79.75303
Latitude: 43.390045
Geometry X:
Geometry Y:

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63 **10 of 16** **SSW/283.8** **107.3 / -2.25** **Associated Paving & Materials Ltd. 850 Syscon Crt Burlington ON L0P 1E0** **ECA**

Approval No: 7171-7DLQCV
Approval Date: 2010-05-31
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
Approval Type: ECA-AIR
Project Type: AIR
Business Name: Associated Paving & Materials Ltd.
Address: 850 Syscon Crt
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/3273-7NQLL4-14.pdf
PDF Site Location:
MOE District: Halton-Peel
City:
Longitude: -79.75303
Latitude: 43.390045
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

63 | 11 of 16 | SSW/283.8 | 107.3 / -2.25 | **Associated Paving & Materials Ltd.**
850 Syscon Crt
Burlington ON L0P 1E0 | ECA

Approval No:	8-3239-91-926	**MOE District:**	Halton-Peel
Approval Date:	2008-02-05	**City:**	
Status:	Revoked and/or Replaced	**Longitude:**	-79.75303
Record Type:	ECA	**Latitude:**	43.390045
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Halton	**Geometry Y:**	

Approval Type: ECA-AIR
Project Type: AIR
Business Name: Associated Paving & Materials Ltd.
Address: 850 Syscon Crt
Full Address:
Full PDF Link:
PDF Site Location:

63 | 12 of 16 | SSW/283.8 | 107.3 / -2.25 | **Associated Paving & Materials Ltd.**
850 Syscon Court Burlington, ON L7L 6C5
Canada
ON | EBR

EBR Registry No:	013-3236	**Decision Posted:**	September 17, 2019
Ministry Ref No:	6849-AY5KEK	**Exception Posted:**	
Notice Type:	Instrument	**Section:**	Part II.1 (20.3 or 20.5)
Notice Stage:	Decision	**Act 1:**	Environmental Protection Act, R.S.O. 1990
Notice Date:		**Act 2:**	Environmental Protection Act
Proposal Date:	July 5, 2018	**Site Location Map:**	43.388804,-79.752882
Year:	2018		

Instrument Type: Environmental Compliance Approval (air)
Off Instrument Name: Environmental Compliance Approval (air) (EPA s.9)
Posted By: Ministry of the Environment, Conservation and Parks
Company Name:
Site Address: 850 Syscon Court Burlington, ON L7L 6C5 Canada
Location Other:
Proponent Name: Associated Paving & Materials Ltd.
Proponent Address: 5365 Munro Court Burlington , ON L7L 5M7 Canada
Comment Period: July 5, 2018 - August 19, 2018 (45 days) Closed
URL: https://ero.ontario.ca/notice/013-3236

Site Location Details:

63 | 13 of 16 | SSW/283.8 | 107.3 / -2.25 | **Associated Paving & Materials Ltd.**
850 Syscon Crt
Burlington ON L7L 5M7 | ECA

Approval No:	8840-BCENZE	**MOE District:**	Halton-Peel
Approval Date:	2019-09-16	**City:**	
Status:	Approved	**Longitude:**	-79.75303
Record Type:	ECA	**Latitude:**	43.390045
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Halton	**Geometry Y:**	

Approval Type: ECA-AIR
Project Type: AIR
Business Name: Associated Paving & Materials Ltd.
Address: 850 Syscon Crt
Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6849-AY5KEK-14.pdf
PDF Site Location:

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63 **14 of 16** **SSW/283.8** **107.3 / -2.25** **Associated Paving Limited** **SPL**
850 Syscon Crt; 5555 Prince William Drive
Burlington; Burlington ON L7L 6C5;

Ref No: 0680-BDCQLX
Year:
Incident Dt: 6/21/2019
Dt MOE Arvl on Scn:
MOE Reported Dt: 6/21/2019
Dt Document Closed:
Site No: 6487-5GPQVV; NA
Facility Name:
MOE Response:
Site County/District: Regional Municipality of Halton; Regional Municipality of Halton
Site Geo Ref Meth: NA;
Site District Office: Halton-Peel; Halton-Peel
Nearest Watercourse:
Site Name: 850 Syscon Court; 5555 Prince William Drive<UNOFFICIAL>
Site Address: 850 Syscon Crt; 5555 Prince William Drive
Site Region: Central
Site Municipality: Burlington; Burlington
Site Lot:
Site Conc: NA;
Site Geo Ref Accu: NA;
Site Map Datum: NA;
Northing: NA;
Easting: NA;
Incident Cause:
Incident Event:
Environment Impact:
Nature of Impact:
Contaminant Qty:
System Facility Address:
Client Name: Associated Paving Limited
Client Type: Partnership
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment:
Incident Reason:
Incident Summary: Associated Paving: Off-site dust impacts
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

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63 **15 of 16** **SSW/283.8** **107.3 / -2.25** **ASSOCIATED PAVING & MATERIALS** **NPR2**
850 SYSCON COURT
BURLINGTON ON L7L6C5

NPRI ID: 10541
Facility ID: 344126, 243617
Latitude: 43.3887
Longitude: -79.753
Note: Substances included on NPRI reports for this NPRI ID are summarized below in the NPRI ID Substances Summary

section. Substances listed in the Substances Summary are included on the basis of NPRI ID only. For entities (NPRI ID) with mobile plants and/or more than one facility location, substances listed above may or may not have been reported for specific facilities/mobile locations. The list of substances additionally includes those which have been included on the NPRI report with an unknown quantity or a quantity of 0.

For specific details about substance quantities, years, release/transfer/disposal methods, the reader is referred the facility report:

https://pollution-waste.canada.ca/national-release-inventory/?fromYear 1993&toYear 2022&name 10541

NPRI ID Substances Summary

CAS No:	7446-09-5	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	Sulphur dioxide		
Name French:	Dioxyde de soufre		
Sort English:	Sulphur dioxide		
Sort French:	Dioxyde de soufre		

CAS No:	NA - M09	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	PM10 - Particulate Matter < 10 Micrometers		
Name French:	PM10 - Matière particulaire < 10 micromètres		
Sort English:	PM10 - Particulate Matter < 10 Micrometers		
Sort French:	PM10 - Matière particulaire < 10 micromètres		

CAS No:	630-08-0	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	Carbon monoxide		
Name French:	Monoxyde de carbone		
Sort English:	Carbon monoxide		
Sort French:	Oxyde de carbone (monoxyde de carbone)		

CAS No:	11104-93-1	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	Nitrogen oxides (expressed as nitrogen dioxide)		
Name French:	Oxydes d'azote (exprimés en dioxyde d'azote)		
Sort English:	Nitrogen oxides (expressed as nitrogen dioxide)		
Sort French:	Oxydes d'azote (exprimés en dioxyde d'azote)		

CAS No:	NA - M16	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	Volatile Organic Compounds (VOCs)		
Name French:	Composés organiques volatils (COV)		
Sort English:	Volatile Organic Compounds (VOCs)		
Sort French:	Composés organiques volatils (COV)		

CAS No:	NA - M08	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	Total particulate matter		
Name French:	Matière particulaire totale		
Sort English:	PM - Total Particulate Matter		
Sort French:	PM - Particules totales		

CAS No:	NA - M10	***Is PAH?:***	FALSE
Is VOC?:	FALSE	***NPRI:***	TRUE
Is DF?:	FALSE		
Name English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Name French:	PM2,5 - Matière particulaire < 2,5 micromètres		

Sort English: PM2.5 - Particulate Matter < 2.5 Micrometers
Sort French: PM2,5 - Matière particulaire < 2,5 micromètres

Geographic Location

DLS Description:		**Datum:**	1983.0
NTS Description:	D-061-F/030-M-5	**Forward Sort Area:**	L7L
Latitude:	43.3887	**SOMA:**	TRUE
Longitude:	-79.753	**ON PEMA:**	TRUE
Census Subdiv ID:	3524002	**QC PEMA:**	FALSE
Ecozone ID:	8	**Quebec Windsor Corr:**	TRUE
Water Survey ID:	2	**Province Code:**	ON

NPRI ID Facility ID

NPRI ID: 10541
Facility ID: 243617

Facility

Facility ID:	243617	**IDM ID:**	9103
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	324121	**GHGRP ID:**	0
NAICS Secondary:	0	**ON GHGRP ID:**	0
NAICS Tertiary:	0		

Facility Name: Associated Paving & Materials
Website:

Address

Address1: 850 Syscon Court
Address2:
City: BURLINGTON
Postal Zip: L7L6C5
Prov:

Address Geographic

Latitude:	43.3887	**Datum:**	1983
Longitude:	-79.753	**Land Survey:**	
UTM Easting:	0.000000	**Topograph:**	
UTM Northing:	0.000000	**Additional Info:**	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	324121	**Start Date:**	1993
Record Year:	1997	**End Date:**	2001

Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	**Start Date:**	1993
Record Year:	2002	**End Date:**	2006

Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code: 324121 ***Start Date:*** 1993
Record Year: 2007 ***End Date:*** 2011
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code: 324121 ***Start Date:*** 1993
Record Year: 2012 ***End Date:*** 2016
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt paving mixture and block manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NAICS Code: 324121 ***Start Date:*** 2017
Record Year: 2017 ***End Date:*** 2021
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt paving mixture and block manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NPRI Report

Report ID: 55944 ***Repor Type ID:*** 1

Report Year:	2011	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	7
Company ID:	111054	**Is Compressor:**	FALSE
Facility ID:	243617	**Is NPRI Part 4:**	TRUE
SWR Report ID:	6783	**Is Battery:**	FALSE

Company

Company Name:	Associated Paving & Materials Ltd.
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Comment

Description En:	General comments about the facility
Description Fr:	Commentaires généraux à propos de l'installation
Comment:	The operation is seasonal.
Note:	Many NPRI Report Comments are truncated in the NPRI data.

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	905
First Name:	Stanley	**Extension:**	
Last Name:	Capobianco	**Fax:**	9056377404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:	E		
Company Name:			

NPRI Report

Report ID:	130168	**Repor Type ID:**	1
Report Year:	2010	**New Reporter:**	TRUE
NPRI ID:	10541	**No of Employees:**	16
Company ID:	111054	**Is Compressor:**	FALSE
Facility ID:	243617	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20100000010541	**Is Battery:**	FALSE

Company

Company Name:	Associated Paving & Materials Ltd.
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI ID Facility ID

NPRI ID:	10541
Facility ID:	344126

Facility

Facility ID:	344126	**IDM ID:**	0
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	324121	**GHGRP ID:**	0

NAICS Secondary:	0	***ON GHGRP ID:***	0
NAICS Tertiary:	0		
Facility Name:	ASSOCIATED PAVING & MATERIALS		
Website:			

Address

Address1:	850 Syscon Court
Address2:	
City:	BURLINGTON
Postal Zip:	L7L6C5
Prov:	

Address Geographic

Latitude:	43.3887	***Datum:***	1983
Longitude:	-79.753	***Land Survey:***	
UTM Easting:	0.000000	***Topograph:***	
UTM Northing:	0.000000	***Additional Info:***	
UTM Zone:	0		

Primary NAICS Details

NAICS Code:	324121	***Start Date:***	1993
Record Year:	1997	***End Date:***	2001
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	***Start Date:***	1993
Record Year:	2002	***End Date:***	2006
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	***Start Date:***	1993
Record Year:	2007	***End Date:***	2011
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	***Start Date:***	1993

Record Year:	2012	**End Date:**	2016
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt paving mixture and block manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NAICS Code:	324121	**Start Date:**	2017
Record Year:	2017	**End Date:**	2021
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt paving mixture and block manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NPRI Report

Report ID:	123346	**Repor Type ID:**	1
Report Year:	2008	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	20
Company ID:	133256	**Is Compressor:**	FALSE
Facility ID:	344126	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20080000010541	**Is Battery:**	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9055421966
First Name:	Stanley	**Extension:**	
Last Name:	Capobianco	**Fax:**	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			

Company Name:

NPRI Report

Report ID:	120011	**Repor Type ID:**	1
Report Year:	2006	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	5
Company ID:	133256	**Is Compressor:**	FALSE
Facility ID:	344126	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20060000010541	**Is Battery:**	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9055421966
First Name:	Stanley	**Extension:**	
Last Name:	Capobianco	**Fax:**	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

NPRI Report

Report ID:	124652	**Repor Type ID:**	1
Report Year:	2007	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	5
Company ID:	133256	**Is Compressor:**	FALSE
Facility ID:	344126	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20070000010541	**Is Battery:**	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9055421966
First Name:	Stanley	**Extension:**	
Last Name:	Capobianco	**Fax:**	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

NPRI Report

Report ID:	117994	***Repor Type ID:***	1
Report Year:	2009	***New Reporter:***	FALSE
NPRI ID:	10541	***No of Employees:***	16
Company ID:	133256	***Is Compressor:***	FALSE
Facility ID:	344126	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20090000010541	***Is Battery:***	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9056371966
First Name:	Stanley	***Extension:***	
Last Name:	Capobianco	***Fax:***	9056377404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

NPRI Report

Report ID:	263887	***Repor Type ID:***	1
Report Year:	2004	***New Reporter:***	FALSE
NPRI ID:	10541	***No of Employees:***	5
Company ID:	133256	***Is Compressor:***	FALSE
Facility ID:	344126	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20040000010541	***Is Battery:***	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9055421966
First Name:	Stanley	***Extension:***	0
Last Name:	Capobianco	***Fax:***	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

NPRI Report

Report ID:	248122	***Repor Type ID:***	1

Report Year:	2005	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	5
Company ID:	133256	**Is Compressor:**	FALSE
Facility ID:	344126	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20050000010541	**Is Battery:**	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9055421966
First Name:	Stanley	**Extension:**	0
Last Name:	Capobianco	**Fax:**	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

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63 | ***16 of 16*** | ***SSW/283.8*** | ***107.3 / -2.25*** | ***ASSOCIATED PAVING & MATERIALS 850 SYSCON COURT BURLINGTON ON L7L6C5*** | ***NPR2***

NPRI ID:	10541	**Latitude:**	43.3887
Facility ID:	377353, 374497	**Longitude:**	-79.753

Note: Substances included on NPRI reports for this NPRI ID are summarized below in the NPRI ID Substances Summary section. Substances listed in the Substances Summary are included on the basis of NPRI ID only. For entities (NPRI ID) with mobile plants and/or more than one facility location, substances listed above may or may not have been reported for specific facilities/mobile locations. The list of substances additionally includes those which have been included on the NPRI report with an unknown quantity or a quantity of 0.

For specific details about substance quantities, years, release/transfer/disposal methods, the reader is referred the facility report:

https://pollution-waste.canada.ca/national-release-inventory/?fromYear 1993&toYear 2022&name 10541

NPRI ID Substances Summary

CAS No:	NA - M08	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	Total particulate matter		
Name French:	Matière particulaire totale		
Sort English:	PM - Total Particulate Matter		
Sort French:	PM - Particules totales		

CAS No:	NA - M16	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	Volatile Organic Compounds (VOCs)		
Name French:	Composés organiques volatils (COV)		
Sort English:	Volatile Organic Compounds (VOCs)		
Sort French:	Composés organiques volatils (COV)		

CAS No:	11104-93-1	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE

Is DF?:	FALSE		
Name English:	Nitrogen oxides (expressed as nitrogen dioxide)		
Name French:	Oxydes d'azote (exprimés en dioxyde d'azote)		
Sort English:	Nitrogen oxides (expressed as nitrogen dioxide)		
Sort French:	Oxydes d'azote (exprimés en dioxyde d'azote)		

CAS No:	NA - M09	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	PM10 - Particulate Matter < 10 Micrometers		
Name French:	PM10 - Matière particulaire < 10 micromètres		
Sort English:	PM10 - Particulate Matter < 10 Micrometers		
Sort French:	PM10 - Matière particulaire < 10 micromètres		

CAS No:	7446-09-5	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	Sulphur dioxide		
Name French:	Dioxyde de soufre		
Sort English:	Sulphur dioxide		
Sort French:	Dioxyde de soufre		

CAS No:	630-08-0	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	Carbon monoxide		
Name French:	Monoxyde de carbone		
Sort English:	Carbon monoxide		
Sort French:	Oxyde de carbone (monoxyde de carbone)		

CAS No:	NA - M10	**Is PAH?:**	FALSE
Is VOC?:	FALSE	**NPRI:**	TRUE
Is DF?:	FALSE		
Name English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Name French:	PM2,5 - Matière particulaire < 2,5 micromètres		
Sort English:	PM2.5 - Particulate Matter < 2.5 Micrometers		
Sort French:	PM2,5 - Matière particulaire < 2,5 micromètres		

Geographic Location

DLS Description:		**Datum:**	1983.0
NTS Description:	D-061-F/030-M-5	**Forward Sort Area:**	L7L
Latitude:	43.3887	**SOMA:**	TRUE
Longitude:	-79.753	**ON PEMA:**	TRUE
Census Subdiv ID:	3524002	**QC PEMA:**	FALSE
Ecozone ID:	8	**Quebec Windsor Corr:**	TRUE
Water Survey ID:	2	**Province Code:**	ON

NPRI ID Facility ID

NPRI ID:	10541
Facility ID:	377353

Facility

Facility ID:	377353	**IDM ID:**	0
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	324121	**GHGRP ID:**	0
NAICS Secondary:	0	**ON GHGRP ID:**	0
NAICS Tertiary:	0		
Facility Name:			
Website:			

Address

Address1: 850 Syscon Court
Address2:
City: BURLINGTON
Postal Zip: L7L6C5
Prov:

Address Geographic

Latitude: 43.3887
Longitude: -79.753
UTM Easting: 0.000000
UTM Northing: 0.000000
UTM Zone: 0
Datum: 1983
Land Survey:
Topograph:
Additional Info:

Primary NAICS Details

NAICS Code: 324121
Record Year: 1997
Start Date: 1993
End Date: 2001
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code: 324121
Record Year: 2002
Start Date: 1993
End Date: 2006
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code: 324121
Record Year: 2007
Start Date: 1993
End Date: 2011
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt Paving Mixture and Block Manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

NAICS Description Fr:

NAICS Code: 324121
Record Year: 2012
Start Date: 1993
End Date: 2016
Key Indus Sector En: Petroleum and Coal Product Refining and Mfg.
Key Indus Sector Fr: Fabrication et raffinage des produits du pétrole et du charbon
NAICS Title En: Asphalt paving mixture and block manufacturing
NAICS Title Fr: Fabrication de mélanges d'asphaltage et de pavés d'asphalte

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NAICS Code:	324121	***Start Date:***	2017
Record Year:	2017	***End Date:***	2021
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt paving mixture and block manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NPRI Report

Report ID:	272728	***Repor Type ID:***	1
Report Year:	2003	***New Reporter:***	FALSE
NPRI ID:	10541	***No of Employees:***	7
Company ID:	136115	***Is Compressor:***	FALSE
Facility ID:	377353	***Is NPRI Part 4:***	FALSE
SWR Report ID:	20030000010541	***Is Battery:***	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS LTD.
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	***Phone:***	9055421966
First Name:	Stanley	***Extension:***	0
Last Name:	Capobianco	***Fax:***	9055427404
Email:	sales@associatedpaving.com		
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			
Company Name:			

NPRI ID Facility ID

NPRI ID: 10541
Facility ID: 374497

Facility

Facility ID:	374497	**IDM ID:**	0
Portable:	FALSE	**AB Approval ID:**	0
NAICS Primary:	324121	**GHGRP ID:**	0
NAICS Secondary:	0	**ON GHGRP ID:**	0
NAICS Tertiary:	0		
Facility Name:			
Website:			

Address

Address1: 850 Syscon Court
Address2:
City: BURLINGTON
Postal Zip: L7L6C5
Prov:

Primary NAICS Details

NAICS Code:	324121	**Start Date:**	1993
Record Year:	1997	**End Date:**	2001
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	**Start Date:**	1993
Record Year:	2002	**End Date:**	2006
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	**Start Date:**	1993
Record Year:	2007	**End Date:**	2011
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt Paving Mixture and Block Manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

NAICS Description Fr:

NAICS Code:	324121	**Start Date:**	1993

Record Year:	2012	**End Date:**	2016
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt paving mixture and block manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NAICS Code:	324121	**Start Date:**	2017
Record Year:	2017	**End Date:**	2021
Key Indus Sector En:	Petroleum and Coal Product Refining and Mfg.		
Key Indus Sector Fr:	Fabrication et raffinage des produits du pétrole et du charbon		
NAICS Title En:	Asphalt paving mixture and block manufacturing		
NAICS Title Fr:	Fabrication de mélanges d'asphaltage et de pavés d'asphalte		

NAICS Description En:

This Canadian industry comprises establishments primarily engaged in manufacturing asphalt paving mixtures and blocks, from purchased asphalt, bituminous materials or coal tar.

NAICS Description Fr:

Cette classe canadienne comprend les établissements dont l'activité principale est la fabrication de mélanges d'asphalte et blocs pour pavage, à partir d'asphalte, de goudron ou de matériaux bitumineux.

NPRI Report

Report ID:	276150	**Repor Type ID:**	1
Report Year:	2002	**New Reporter:**	FALSE
NPRI ID:	10541	**No of Employees:**	3
Company ID:	135859	**Is Compressor:**	FALSE
Facility ID:	374497	**Is NPRI Part 4:**	FALSE
SWR Report ID:	20020000010541	**Is Battery:**	FALSE

Company

Company Name:	ASSOCIATED PAVING & MATERIALS LTD.
Trade Name En:	
Trade Name Fr:	
DUNS No:	0
Website:	

NPRI Report Contact

Contact Type:	NPRI	**Phone:**	9055421966
First Name:	Stanley	**Extension:**	0
Last Name:	Capobianco	**Fax:**	9055427404
Email:			
Description En:	Public Contact		
Description Fr:	Responsable des renseignements au public		
Position:	Sales		
Language:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Company Name:					

64 1 of 1 NE/289.5 109.7 / 0.20 OAKVILLE ON SPL

Ref No: 1-C4RZK
Year:
Incident Dt: 4/8/2021 7:32:00 AM
Dt MOE Arvl on Scn:
MOE Reported Dt: 4/8/2021 7:42:21 AM
Dt Document Closed: 4/8/2021 12:26:05 PM
Site No:
Facility Name:
MOE Response: Desktop Response
Site County/District:
Site Geo Ref Meth:
Site District Office: Halton-Peel District Office
Nearest Watercourse:
Site Name:
Site Address:
Site Region: REGIONAL MUNICIPALITY OF HALTON
Site Municipality: OAKVILLE
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause:
Incident Event:
Environment Impact: 1 Minor Impact
Nature of Impact:
Contaminant Qty: 45 litre (L)
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata: "integration_ids": "PR00001232693"],"wkts": "POINT (-79.749500 43.394734)"],"creation_date":"2021-04-08"
Contaminant Code:
Contaminant Name: COOLANT (N.O.S.)
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: Land
Receiving Environment:
Incident Reason:
Incident Summary: Oakville Transit Coolant Spill
Activity Preceding Spill:
Property 2nd Watershed: Lake Ontario and Niagara Peninsula
Property Tertiary Watershed: 02HB-Credit - 16 Mile
Sector Type:
SAC Action Class:
Source Type:
Municipality No:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq: 0 No Impact
Agency Involved:

65 1 of 20 WSW/295.6 114.1 / 4.52 COGECO CABLE CANADA INC. 950 SYSCON ROAD BURLINGTON CITY ON CA

Certificate #: 8-3190-97-
Application Year: 97
Issue Date: 5/20/1997
Approval Type: Industrial air
Status: Approved
Application Type:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: 250KW EMERG. GEN-SET FOR COMPUTER ROOM
Contaminants: Nitrogen Oxides, Stoddard Solvent
Emission Control: Silencer

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65 **2 of 20** **WSW/295.6** **114.1 / 4.52** **Cogeco Cable Canada**
950 Syscon Rd
Burlington ON L7R 4S6 **GEN**

Generator No: ON6849567
SIC Code: 517510
SIC Description: Cable and Other Program Distribution
Approval Years: 07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

---

65 **3 of 20** **WSW/295.6** **114.1 / 4.52** **950 SYSCON ROAD**
BURLINGTON ON **HINC**

External File Num: FS INC 0810-05869
Fuel Occurrence Type: Pipeline Strike
Date of Occurrence: 9/19/2008
Fuel Type Involved: Natural Gas
Status Desc: Completed - Causal Analysis(End)
Job Type Desc: Incident/Near-Miss Occurrence (FS)
Oper. Type Involved: Construction Site (pipeline strike)
Service Interruptions: No
Property Damage: No
Fuel Life Cycle Stage: Transmission, Distribution and Transportation
Root Cause: Root Cause: Equipment/Material/Component:No Procedures:No Maintenance:No Design:No Training:No Management:Yes Human Factors:Yes
Reported Details:
Fuel Category: Gaseous Fuel
Occurrence Type: Incident
Affiliation: Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)
County Name: Halton
Approx. Quant. Rel:
Nearby body of water:
Enter Drainage Syst.:

Approx. Quant. Unit:
Environmental Impact:

---

65 *4 of 20* *WSW/295.6* *114.1 / 4.52* ***Cogeco Cable Canada*** ***GEN***
950 Syscon Rd
Burlington ON

Generator No:	ON6849567
SIC Code:	517510
SIC Description:	Cable and Other Program Distribution
Approval Years:	2009
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS

---

65 *5 of 20* *WSW/295.6* *114.1 / 4.52* ***Cogeco Cable Canada GP Inc. operating as*** ***ECA***
Cogeco Cable Canada LP
950 Syscon Rd
Burlington ON

Approval No:	3256-92PLLU	***MOE District:***	
Approval Date:	1/25/2013	***City:***	Burlington
Status:	Approved	***Longitude:***	
Record Type:		***Latitude:***	
Link Source:		***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:			
Project Type:	Air/Noise		
Business Name:			
Address:			
Full Address:			
Full PDF Link:			
PDF Site Location:			

---

65 *6 of 20* *WSW/295.6* *114.1 / 4.52* ***Cogeco Cable Canada*** ***GEN***
950 Syscon Rd
Burlington ON

Generator No:	ON6849567
SIC Code:	517510
SIC Description:	Cable and Other Program Distribution
Approval Years:	2010

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

---

65 ***7 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Cable Canada***
950 Syscon Rd
Burlington ON ***GEN***

Generator No: ON6849567
SIC Code: 517510
SIC Description: Cable and Other Program Distribution
Approval Years: 2011
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

---

65 ***8 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Cable Canada***
950 Syscon Rd
Burlington ON L7R 4S6 ***GEN***

Generator No: ON6849567
SIC Code: 517510
SIC Description: Cable and Other Program Distribution
Approval Years: 2012
PO Box No:

Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

---

65 ***9 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Cable Canada LP***
950 Syscon RD
Burlington ON L7L 5J7 ***EASR***

Approval No: R-003-8421500032
Status: REGISTERED
Date: 2014-06-10
Record Type: EASR
Link Source: MOFA
Project Type: Heating System
Full Address:
Approval Type: EASR-Heating System
SWP Area Name: Halton
PDF URL:
PDF Site Location:

MOE District: Halton-Peel
Municipality: Burlington
Latitude: 43.39083333
Longitude: -79.75611111
Geometry X:
Geometry Y:

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65 ***10 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Cable Canada***
950 Syscon Rd
Burlington ON ***GEN***

Generator No: ON6849567
SIC Code: 517510
SIC Description:
Approval Years: 2013
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

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65 | 11 of 20 | WSW/295.6 | 114.1 / 4.52 | Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP, 950 Syscon Rd, Burlington ON | SPL

Ref No: 2844-9PA9WF
Year:
Incident Dt: 2014/09/24
Dt MOE Arvl on Scn:
MOE Reported Dt: 2014/09/25
Dt Document Closed: 2014/10/09
Site No: 5982-8X6LC3
Facility Name:
MOE Response: No Field Response
Site County/District:
Site Geo Ref Meth: 0-1 metre eg. Survey
Site District Office:
Nearest Watercourse:
Site Name: 950 Syscon Road
Site Address: 950 Syscon Rd
Site Region:
Site Municipality: Burlington
Site Lot:
Site Conc:
Site Geo Ref Accu: GIS Software
Site Map Datum: NAD83
Northing: 4804787
Easting: 600809
Incident Cause: Fire/Explosion
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Air Pollution
Contaminant Qty: 907.185 kg
System Facility Address:
Client Name: Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP
Client Type:
Call Report Locatn Geodata:
Contaminant Code: 38
Contaminant Name: HALON (CFC)
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment:
Incident Reason: Equipment Failure
Incident Summary: Cogeco Cable: 2000 lbs halon to atmosphere
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Structure
SAC Action Class: Air Spills - Fires
Source Type:

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65 | 12 of 20 | WSW/295.6 | 114.1 / 4.52 | Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP, 950 Syscon Rd | SPL

Burlington ON

Ref No:	4675-9PAMXZ	***Municipality No:***	
Year:		***Nature of Damage:***	
Incident Dt:	2014/09/24	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	2014/09/25	***Health/Env Conseq:***	
Dt Document Closed:	2014/10/09	***Agency Involved:***	
Site No:	5982-8X6LC3		
Facility Name:			
MOE Response:	No Field Response		
Site County/District:			
Site Geo Ref Meth:	0-1 metre eg. Survey		
Site District Office:			
Nearest Watercourse:			
Site Name:	950 Syscon Road		
Site Address:	950 Syscon Rd		
Site Region:			
Site Municipality:	Burlington		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:	GIS Software		
Site Map Datum:	NAD83		
Northing:	4804787		
Easting:	600809		
Incident Cause:	Fire/Explosion		
Incident Event:			
Environment Impact:	Confirmed		
Nature of Impact:	Air Pollution		
Contaminant Qty:	0 other - see incident description		
System Facility Address:			
Client Name:	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP		
Client Type:			
Call Report Locatn Geodata:			
Contaminant Code:	27		
Contaminant Name:	FIRE SUPPRESSANT		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:			
Receiving Environment:			
Incident Reason:	Other		
Incident Summary:	Cogeco release of 2-hyddroperfluoropropane to atm fire syst		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:	Non-Point Source (i.e. run-off)		
SAC Action Class:	Air Spills - Gases and Vapours		
Source Type:			

65	13 of 20	WSW/295.6	114.1 / 4.52	950 Syscon Rd Burlington ON	EHS

Order No:	20150317053	***Nearest Intersection:***	
Status:	C	***Municipality:***	Burlington
Report Type:	Standard Report	***Client Prov/State:***	ON
Report Date:	24-MAR-15	***Search Radius (km):***	.25
Date Received:	17-MAR-15	***X:***	-79.755701
Previous Site Name:		***Y:***	43.390718
Lot/Building Size:			
Additional Info Ordered:	City Directory; Aerial Photos		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
65	14 of 20	WSW/295.6	114.1 / 4.52	Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP 950 Syscon Rd Burlington ON L7R 4S6	ECA

Approval No: 3256-92PLLU
Approval Date: 2013-01-25
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
MOE District: Halton-Peel
City:
Longitude: -79.75392
Latitude: 43.390663
Geometry X:
Geometry Y:
Approval Type: ECA-AIR
Project Type: AIR
Business Name: Cogeco Cable Canada GP Inc. operating as Cogeco Cable Canada LP
Address: 950 Syscon Rd
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/1252-8X6LBA-14.pdf
PDF Site Location:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
65	15 of 20	WSW/295.6	114.1 / 4.52	Cogeco Cable Canada 950 Syscon Rd Burlington ON L7R 4S6	GEN

Generator No: ON6849567
SIC Code: 517510
SIC Description: 517510
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
65	16 of 20	WSW/295.6	114.1 / 4.52	Cogeco Connexion LP 950 Syscon Rd Burlington ON L7R 4S6	GEN

Generator No: ON6849567
SIC Code: 517510
SIC Description: 517510
Approval Years: 2016
PO Box No:
Country: Canada
Status:

Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

---

65 ***17 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Cable Canada***
950 Syscon Rd
Burlington ON L7R 4S6 ***GEN***

Generator No: ON6849567
SIC Code: 517510
SIC Description: 517510
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

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65 ***18 of 20*** ***WSW/295.6*** ***114.1 / 4.52*** ***Cogeco Connexion LP ON***
950 Syscon Rd
Burlington ON L7R 4S6 ***GEN***

Generator No: ON6849567
SIC Code:
SIC Description:
Approval Years: As of Dec 2017
PO Box No:
Country: Canada
Status: Registered
Co Admin:

Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 148 C
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 113 C
Waste Class Name: Acid solutions - containing other metals and non-metals

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65	19 of 20	WSW/295.6	114.1 / 4.52	Cogeco Connexion LP ON 950 Syscon Rd Burlington ON L7R 4S6	GEN

Generator No: ON6849567
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 113 C
Waste Class Name: Acid solutions - containing other metals and non-metals

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 C
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

65	20 of 20	WSW/295.6	114.1 / 4.52	Cogeco Connexion Ltd 950 Syscon Road Burlington ON L7R 4S6	GEN

Generator No: ON5332118
SIC Code:
SIC Description:

Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	145 L
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	145 H
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	331 I
Waste Class Name:	WASTE COMPRESSED GASES

66 **1 of 1** **SE/298.5** **105.6 / -3.98** **ON** **WWIS**

Well ID:	7372337	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	11/05/2020
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z341760	**Contractor:**	7644
Tag:	A301436	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008507747	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	601331.00
Code OB Desc:		**North83:**	4804865.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	09/28/2020	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Links

Bore Hole ID:	1008507747	***Tag No:***	A301436
Depth M:		***Contractor:***	7644
Year Completed:	2020	***Latitude:***	43.3898181749701
Well Completed Dt:	09/28/2020	***Longitude:***	-79.7488696564998
Audit No:	Z341760	***Y:***	43.38981817290464
Path:	737\7372337.pdf	***X:***	-79.74886950665885

67	*1 of 20*	*W/298.6*	*115.8 / 6.30*	***HADRIAN MANUFACTURING INC*** ***965 SYSCON RD*** ***BURLINGTON ON L7L 5S3***	***SCT***

Established:	1983
Plant Size (ft²):	70000
Employment:	60

--Details--

Description:	OFFICE AND STORE FIXTURES, PARTITIONS, SHELVING, AND LOCKERS, EXCEPT WOOD
SIC/NAICS Code:	2542

67	*2 of 20*	*W/298.6*	*115.8 / 6.30*	***Hadrian Manufacturing Inc.*** ***965 Syscon Rd*** ***Burlington ON L7L 5S3***	***SCT***

Established:	01-JAN-83
Plant Size (ft²):	70000
Employment:	

--Details--

Description:	Showcase, Partition, Shelving and Locker Manufacturing
SIC/NAICS Code:	337215
Description:	Showcase, Partition, Shelving and Locker Manufacturing
SIC/NAICS Code:	337215

67	*3 of 20*	*W/298.6*	*115.8 / 6.30*	***Hadrian Manufacturing Inc.*** ***965 Syscon Road CITY OF BURLINGTON*** ***ON***	***EBR***

EBR Registry No:	IA7E1635	***Decision Posted:***	
Ministry Ref No:	8351197 19971030	***Exception Posted:***	
Notice Type:	Instrument Decision	***Section:***	
Notice Stage:		***Act 1:***	
Notice Date:	May 25, 1998	***Act 2:***	
Proposal Date:	November 04, 1997	***Site Location Map:***	
Year:	1997		
Instrument Type:	(EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)		
Off Instrument Name:			
Posted By:			
Company Name:	Hadrian Manufacturing Inc.		
Site Address:			
Location Other:			
Proponent Name:			
Proponent Address:	965 Syscon Road, Burlington Ontario, L7L 5S3		
Comment Period:			
URL:			

Site Location Details:

965 Syscon Road CITY OF BURLINGTON

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67 ***4 of 20*** ***W/298.6*** ***115.8 / 6.30*** ***HADRIAN MANUFACTURING INC.*** ***GEN***
965 SYSCON ROAD
BURLINGTON ON L9L 5S3

Generator No:	ON1647700
SIC Code:	4222
SIC Description:	FORM WORK
Approval Years:	92,93,97,98,99,00,01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	131
Waste Class Name:	NEUTRALIZED WASTES - HEAVY METALS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	265
Waste Class Name:	GRAPHIC ART WASTES

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67 ***5 of 20*** ***W/298.6*** ***115.8 / 6.30*** ***HADRIAN MANUFACTURING INC. 19-743*** ***GEN***
965 SYSCON ROAD
BURLINGTON ON L9L 5S3

Generator No:	ON1647700
SIC Code:	4222
SIC Description:	FORM WORK
Approval Years:	94,95,96
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	252

Waste Class Name: WASTE OILS & LUBRICANTS

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67 | ***6 of 20*** | ***W/298.6*** | ***115.8 / 6.30*** | ***HADRIAN MANUFACTURING INC.***
965 SYSCON RD
BURLINGTON ON L7L 5S3 | ***GEN***

Generator No: ON1647700
SIC Code:
SIC Description:
Approval Years: 02,03,04,05,06,07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

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67 | ***7 of 20*** | ***W/298.6*** | ***115.8 / 6.30*** | ***HADRIAN MANUFACTURING INC.***
965 SYSCON RD
BURLINGTON ON L7L 5S3 | ***GEN***

Generator No: ON1647700
SIC Code: 332321
SIC Description: Metal Window and Door Manufacturing
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

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67 | **8 of 20** | **W/298.6** | **115.8 / 6.30** | **HADRIAN MANUFACTURING INC.**
965 SYSCON RD
BURLINGTON ON L7L 5S3 | **GEN**

Generator No: ON1647700
SIC Code: 332321
SIC Description: Metal Window and Door Manufacturing
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

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67 | **9 of 20** | **W/298.6** | **115.8 / 6.30** | **HADRIAN MANUFACTURING INC.**
965 SYSCON RD
BURLINGTON ON L7L 5S3 | **GEN**

Generator No: ON1647700
SIC Code: 332321
SIC Description: Metal Window and Door Manufacturing
Approval Years: 2011
PO Box No:
Country:

Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

67	10 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code: 332321
SIC Description: Metal Window and Door Manufacturing
Approval Years: 2012
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	11 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON	GEN

Generator No: ON1647700
SIC Code: 332321
SIC Description: METAL WINDOW AND DOOR MANUFACTURING
Approval Years: 2013
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	12 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code: 332321
SIC Description: METAL WINDOW AND DOOR MANUFACTURING
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

67	13 of 20	W/298.6	115.8 / 6.30	***HADRIAN MANUFACTURING INC.*** ***965 SYSCON RD*** ***BURLINGTON ON L7L 5S3***	GEN

Generator No: ON1647700
SIC Code: 332321
SIC Description: METAL WINDOW AND DOOR MANUFACTURING
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	14 of 20	W/298.6	115.8 / 6.30	**HADRIAN MANUFACTURING INC.** **965 SYSCON RD** **BURLINGTON ON L7L 5S3**	GEN

Generator No: ON1647700
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 131 T
Waste Class Name: Neutralized solutions - containing heavy metals

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 T
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 212 I
Waste Class Name: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 262 L
Waste Class Name: Detergents and soaps

Waste Class: 265 L
Waste Class Name: Graphic arts wastes

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

67	15 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code: 332321
SIC Description: METAL WINDOW AND DOOR MANUFACTURING
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 131
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 265
Waste Class Name: GRAPHIC ART WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	16 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 T
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Waste Class: 262 L
Waste Class Name: Detergents and soaps

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 265 L
Waste Class Name: Graphic arts wastes

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

Waste Class: 131 T
Waste Class Name: Neutralized solutions - containing heavy metals

Waste Class: 232 L
Waste Class Name: Polymeric resins

Waste Class: 212 I
Waste Class Name: Aliphatic solvents and residues

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

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Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	17 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 265 L
Waste Class Name: Graphic arts wastes

Waste Class: 131 T
Waste Class Name: Neutralized solutions - containing heavy metals

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 148 T
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 262 L
Waste Class Name: Detergents and soaps

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 212 I
Waste Class Name: Aliphatic solvents and residues

Waste Class: 145 L
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 331 I
Waste Class Name: Waste compressed gases including cylinders

Waste Class: 232 L
Waste Class Name: Polymeric resins

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 213 I
Waste Class Name: Petroleum distillates

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	18 of 20	W/298.6	115.8 / 6.30	HADRIAN MANUFACTURING INC. 965 SYSCON RD BURLINGTON ON L7L 5S3	GEN

Generator No: ON1647700
SIC Code:

SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 331 I
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 122 C
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 252 L
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 232 L
Waste Class Name: POLYMERIC RESINS

Waste Class: 145 I
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 212 I
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 145 L
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213 I
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 251 L
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 131 T
Waste Class Name: NEUTRALIZED WASTES - HEAVY METALS

Waste Class: 265 L
Waste Class Name: GRAPHIC ART WASTES

Waste Class: 262 L
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 148 T
Waste Class Name: INORGANIC LABORATORY CHEMICALS

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67 | ***19 of 20*** | ***W/298.6*** | ***115.8 / 6.30*** | ***965 Syscon Rd Burlington ON L7L 5S3*** | ***EHS***

Order No: 20301400186
Status: C
Report Type: RSC Report (Rural)
Report Date: 19-OCT-20
Date Received: 14-OCT-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Topographic Maps; City Directory; Aerial Photos

Nearest Intersection:
Municipality:
Client Prov/State: OH
Search Radius (km): .3
X: -79.75557017
Y: 43.3927192

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
67	20 of 20	W/298.6	115.8 / 6.30	965 Syscon Rd Burlington ON L7L 5S3	EHS

Order No:	20301400186	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	RSC Report (Rural)	**Client Prov/State:**	OH
Report Date:	19-OCT-20	**Search Radius (km):**	.3
Date Received:	14-OCT-20	**X:**	-79.75557017
Previous Site Name:		**Y:**	43.3927192
Lot/Building Size:			

Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Topographic Maps; City Directory; Aerial Photos

Unplottable Summary

Total: 69 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	The Regional Municipality of Halton	North and South Service Rd	Oakville ON	
CA	RRL Burloak Inc.		Oakville ON	
CA	Petro-Canada Inc.	Various Sites Across Province of Ontario	Oakville ON	
CA	RRL Burloak Inc.		Oakville ON	
CA	Petro-Canada	Various Sites Across Province of Ontario	Oakville ON	
CA	Petro-Canada	Various Sites Across Province of Ontario	Oakville ON	
CA	Dunster Investments Limited	Burloak Drive and Block 9 Access Road	Burlington ON	
CA	Petro-Canada		Burlington ON	
CA	The Corporation of the Town of Oakville	Wyecroft Rd	Oakville ON	
CA	Suncor Energy Products Inc.		Burlington ON	
CA		South Service Road	Oakville ON	
CA		Part of Lots 34 & 35, Concession 3	Oakville ON	
CA	R.SHRADER (CANADA) LTD.	SOUTH SERVICE RD.	OAKVILLE TOWN ON	
CA	MARPAL PROPERTIES LTD.	WYECROFT RD.	OAKVILLE ON	
CA	SYSCON PROPERTIES LTD.	SYSCON ROAD WITHIN LOT 2	BURLINGTON CITY ON	
CA	BOYD POLLOCK	HARVESTER RD.	BURLINGTON CITY ON	
CA	PUDGEWAL DEVELOPMENT CORP. - PLAN #M-192	HARVESTER ROAD	BURLINGTON CITY ON	

CA	BRONTE PARK PLACE	WYECROFT RD.	OAKVILLE TOWN ON	
CA	MYTRAX DEVELOPMENTS INC.	S. SERVICE RD. PRIV. IND. DEV.	BURLINGTON CITY ON	
CA	VILLAGE AUTO & INDUSTRIAL PARK	INDUSTRIAL SITE WYECROFT RD.	OAKVILLE TOWN ON	
CA	WOODSUMMIT INVESTMENTS LTD. COL-LAM INVE	HARVESTER RD.	BURLINGTON CITY ON	
CA	NORTHCOTE DEVELOPMENTS LTD.	WYECROFT ROAD	OAKVILLE TOWN ON	
CA	LAKELAND DEVELOPMENT CORPORATION	HARVESTER ROAD PRIVATE	BURLINGTON CITY ON	
CA	SYSCON PROPERTIES LTD.	SYSCON ROAD WITHIN LOT 2	BURLINGTON CITY ON	
CA	485046 ONTARIO INC.	HARVESTER RD.	BURLINGTON CITY ON	
CA	BAMBURGH BUILDING CORPORATION	WYECROFT RD. BRONTE BUS. PARK	OAKVILLE TOWN ON	
CA	COOPER CONSTRUCTION LTD.	TRIDON LAND DIV. WYECROFT RD.	OAKVILLE TOWN ON	
CA	BOYD POLLOCK	HARVESTER RD.	BURLINGTON CITY ON	
CA	PINETREE DEVELOPMENT CO. LTD. DO-196	SOUTH SERVICE RD.	OAKVILLE TOWN ON	
CA	BERL-TON INVESTMENTS LIMITED	HARVESTER RD.	BURLINGTON CITY ON	
CA	T.E. TAYLOR CONSTRUCTION	AUTO 2000 HARVESTER RD.	BURLINGTON CITY ON	
CONV	LONG MANUFACTURING		ON	
EBR	Petro-Canada Petroleum Products		Town of Oakville ON	
EBR	Long Manufacturing Limited	Town of Oakville TOWN OF OAKVILLE	ON	
EBR	LONG MANUFACTURING LIMITED		Town of Oakville ON	
ECA	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.	Various Locations in Ontario	Oakville ON	L6L 6N5
ECA	Suncor Energy Inc.	Various Locations in Ontario	Oakville ON	L6L 6N5
ECA	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.	Various Locations in Ontario	Oakville ON	L6L 6N5
ECA	Suncor Energy Inc., Suncor	Various Locations in Ontario	Oakville ON	L6L 6N5

	Energy Products Inc., and 1277136 Alberta Ltd.			
ECA	Pauls Burloak Nomineeco Inc.	Part of Lots 34 & 35, Concession 3 S.D.S	Oakville ON	
ECA	Petro-Canada		Oakville ON	L6L 6N5
ECA	Suncor Energy Inc.	Various locations in Ontario	Oakville ON	L6L 6N5
ECA	The Regional Municipality of Halton	North and South Service Rd	Oakville ON	L6M 3L1
ECA	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.	Various locations in Ontario	Oakville ON	L6L 6N5
ECA	The Regional Municipality of Halton	North and South Service Rd	Oakville ON	L6M 3L1
ECA	Dunster Investments Limited	Burloak Drive and Block 9 Access Road	Burlington ON	M3H 5V3
ECA	Petro-Canada	Various Sites Across Province of Ontario	Oakville ON	L6L 6N5
ECA	The Corporation of the Town of Oakville	Wyecroft Rd	Oakville ON	L6H 0H3
ECA	Dunster Investments Limited	Burloak Drive and Block 9 Access Road	Burlington ON	M3H 5V3
ECA	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.	Various locations in Ontario	Oakville ON	L6L 6N5
ECA	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.	Various locations in Ontario	Oakville ON	L6L 6N5
ECA	Petro-Canada Inc.	Various Sites Across Province of Ontario	Oakville ON	L6L 6N5
ECA	Petro-Canada	Various Sites Across Province of Ontario	Oakville ON	L6L 6N5
EHS		Burloak Dr	Burlington ON	
GEN	SHELL CANADA LTD.	PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7	OAKVILLE ON	
GEN	SHELL CANADA LTD. 34-281	PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7	OAKVILLE ON	
GEN	SHELL CANADA LIMITED	PT. LOT 35, CONC.3 SDS DRAWING 467-79-3	TOWN OF OAKVILLE ON	
GEN	CANADIAN NATIONAL RAILWAY	VARIOUS SITES WITHIN THE MOEE CENTRAL REGION	(SEE SCHEDULE "B") ON	
GEN	CANADIAN NATIONAL RAILWAY	VARIOUS SITES WITHIN THE MOEE CENTRAL REGION	(SEE SCHEDULE "B") ON	

LIMO	Oakville Refinery Shell Canada Town of Oakville	Lot 35, Concession 3 Halton	ON
REC	SANEXEN ENVIRONMENTAL SERVICES INC.	TRANS-NORTHERN PIPELINES INC. OAKVILLE PUMP & METER STN.,BURLOAK DR.	OAKVILLE ON
SPL	PETRO-CANADA	TANK TRUCK (CARGO)	OAKVILLE TOWN ON
SPL	PETRO-CANADA	SERVICE STATION	OAKVILLE TOWN ON
SPL		at Harvester Rd	Burlington ON
SPL	PETRO-CANADA	BULK PLANT/TERMINAL	OAKVILLE TOWN ON
SPL	CANADIAN NATIONAL RAILWAY	CNR YARD. TRAIN	OAKVILLE TOWN ON
SPL	PETRO-CANADA	TANK TRUCK (CARGO)	OAKVILLE TOWN ON
SPL	Suncor Energy Inc.		Burlington ON
WWIS		lot 1 con 3	ON

Unplottable Report

Site: ***The Regional Municipality of Halton***
North and South Service Rd Oakville ON

Database: ***CA***

Certificate #:	9992-6YMQ9D
Application Year:	2007
Issue Date:	2/22/2007
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***RRL Burloak Inc.***
Oakville ON

Database: ***CA***

Certificate #:	9823-6R6QPT
Application Year:	2006
Issue Date:	7/20/2006
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***Petro-Canada Inc.***
Various Sites Across Province of Ontario Oakville ON

Database: ***CA***

Certificate #:	6118-7KFR63
Application Year:	2008
Issue Date:	10/17/2008
Approval Type:	Industrial Sewage Works
Status:	Revoked and/or Replaced
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***RRL Burloak Inc.***
Oakville ON

Database: ***CA***

Certificate #:	5688-6RLS3K

Application Year: 2006
Issue Date: 7/14/2006
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Petro-Canada***
Various Sites Across Province of Ontario Oakville ON

Database: ***CA***

Certificate #: 3016-5ZBQQB
Application Year: 2005
Issue Date: 11/2/2005
Approval Type: Industrial Sewage Works
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Petro-Canada***
Various Sites Across Province of Ontario Oakville ON

Database: ***CA***

Certificate #: 3016-5ZBQQB
Application Year: 2004
Issue Date: 10/15/2004
Approval Type: Industrial Sewage Works
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Dunster Investments Limited***
Burloak Drive and Block 9 Access Road Burlington ON

Database: ***CA***

Certificate #: 2962-5QEKCR
Application Year: 2003
Issue Date: 8/25/2003
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Petro-Canada***
Burlington ON

Database: ***CA***

Certificate #: 2556-5YEKZ8
Application Year: 2004
Issue Date: 4/28/2004
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Corporation of the Town of Oakville***
Wyecroft Rd Oakville ON

Database: ***CA***

Certificate #: 2385-8AKGF4
Application Year: 2010
Issue Date: 10/26/2010
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Suncor Energy Products Inc.***
Burlington ON

Database: ***CA***

Certificate #: 0845-6FHK5G
Application Year: 2007
Issue Date: 12/11/2007
Approval Type: Industrial Sewage Works
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site:
South Service Road Oakville ON

Database: ***CA***

Certificate #: 5720-57CLFD
Application Year: 02
Issue Date: 2/26/02
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: The Corporation of the Regional Municipality of Halton
Client Address: 1151 Bronte Road

Client City: Oakville
Client Postal Code: L6M 3L1
Project Description: This application is for approval to install watermain on South Service Road
Contaminants:
Emission Control:

Site: ***Database:*** ***CA***
Part of Lots 34 & 35, Concession 3 Oakville ON

Certificate #: 6159-4Z5L5Z
Application Year: 01
Issue Date: 11/5/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: Urban Core Road Builders Consortium Inc.
Client Address: 30 Floral Parkway
Client City: Concord
Client Postal Code: L4K 4R1
Project Description: Construction of a Storm Management Pond for quality and quanity control in the Shell Business Park Lands
Contaminants:
Emission Control:

Site: ***R.SHRADER (CANADA) LTD.*** ***Database:*** ***CA***
SOUTH SERVICE RD. OAKVILLE TOWN ON

Certificate #: 7-1136-85-866
Application Year: 85
Issue Date: 12/13/86
Approval Type: Municipal water
Status: Received in 1985, Issued in 1986
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MARPAL PROPERTIES LTD.*** ***Database:*** ***CA***
WYECROFT RD. OAKVILLE ON

Certificate #: 3-0396-85-006
Application Year: 85
Issue Date: 5/27/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***SYSCON PROPERTIES LTD.*** ***Database:*** ***CA***
SYSCON ROAD WITHIN LOT 2 BURLINGTON CITY ON

Certificate #: 7-1852-89-
Application Year: 89

Issue Date: 11/14/1989
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BOYD POLLOCK***
HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-1005-88-
Application Year: 88
Issue Date: 7/13/1988
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***PUDGEWAL DEVELOPMENT CORP. - PLAN #M-192***
HARVESTER ROAD BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0018-90-
Application Year: 90
Issue Date: 1/23/1990
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BRONTE PARK PLACE***
WYECROFT RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-1511-89-
Application Year: 89
Issue Date: 9/15/1989
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MYTRAX DEVELOPMENTS INC.***
S. SERVICE RD. PRIV. IND. DEV. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0020-89-
Application Year: 89
Issue Date: 4/21/1989
Approval Type: Municipal water
Status: Cancelled
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***VILLAGE AUTO & INDUSTRIAL PARK***
INDUSTRIAL SITE WYECROFT RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-1980-88-
Application Year: 88
Issue Date: 12/7/1988
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***WOODSUMMIT INVESTMENTS LTD. COL-LAM INVE***
HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0445-86-
Application Year: 86
Issue Date: 5/15/1986
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***NORTHCOTE DEVELOPMENTS LTD.***
WYECROFT ROAD OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-1059-90-
Application Year: 90
Issue Date: 6/18/1990
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:

Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***LAKELAND DEVELOPMENT CORPORATION***
HARVESTER ROAD PRIVATE BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0455-89-
Application Year: 89
Issue Date: 6/5/1990
Approval Type: Municipal sewage
Status: Cancelled
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***SYSCON PROPERTIES LTD.***
SYSCON ROAD WITHIN LOT 2 BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-2240-89-
Application Year: 89
Issue Date: 11/14/1989
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***485046 ONTARIO INC.***
HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1095-89-
Application Year: 89
Issue Date: 6/14/1989
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BAMBURGH BUILDING CORPORATION***
WYECROFT RD. BRONTE BUS. PARK OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-2434-88-
Application Year: 88
Issue Date: 1/20/1989

Approval Type: Municipal sewage
Status: Approved in 1989
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***COOPER CONSTRUCTION LTD.***
TRIDON LAND DIV. WYECROFT RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-2428-88-
Application Year: 88
Issue Date: 2/23/1989
Approval Type: Municipal sewage
Status: Approved in 1989
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BOYD POLLOCK***
HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1159-88-
Application Year: 88
Issue Date: 7/13/1988
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***PINETREE DEVELOPMENT CO. LTD. DO-196***
SOUTH SERVICE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-0945-86-
Application Year: 86
Issue Date: 7/17/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BERL-TON INVESTMENTS LIMITED***
HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-2183-87-
Application Year: 87
Issue Date: 12/17/1987
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***T.E. TAYLOR CONSTRUCTION***
AUTO 2000 HARVESTER RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0632-87-
Application Year: 87
Issue Date: 5/4/1987
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***LONG MANUFACTURING***
ON

Database: ***CONV***

File No:
Crown Brief No: 98-0000-9003
Court Location:
Publication City:
Publication Title:
Act:
Act(s):
First Matter:
Second Matter:
Investigation 1:
Investigation 2:
Penalty Imposed:
Description: THIS IS THE CENTRAL BRIEF FOR ALL P.O.A. TICKETS
Background:
URL:

Location:
Region: CENTRAL REGION
Ministry District:

Additional Details

Publication Date:
Count: 1
Act: EPA
Regulation: 347
Section: 18 (7)
Act/Regulation/Section: EPA-347-18 (7)
Date of Offence:
Date of Conviction:
Date Charged: 10/23/00
Charge Disposition: SUSPENDED SENTENCE

Fine: $250.00
Synopsis:

Site: ***Petro-Canada Petroleum Products***
Town of Oakville ON

Database: ***EBR***

EBR Registry No: IA7E0918.D
Ministry Ref No:
Notice Type: Instrument
Notice Stage:
Notice Date:
Proposal Date: 6/23/97
Year: 1997
Instrument Type: EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)
Off Instrument Name:
Posted By:
Company Name:
Site Address:
Location Other:
Proponent Name:
Proponent Address: Petro-Canada Petroleum Products, Oakville Refinery,3275 Rebecca St.,Oakville, Ontario,L5N 6G7
Comment Period:
URL:

Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Site Location Details:

Town of Oakville

Site: ***Long Manufacturing Limited***
Town of Oakville TOWN OF OAKVILLE ON

Database: ***EBR***

EBR Registry No: IA8E0425
Ministry Ref No: 8356696
Notice Type: Instrument Decision
Notice Stage:
Notice Date: May 25, 1998
Proposal Date: April 02, 1998
Year: 1998
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Off Instrument Name:
Posted By:
Company Name: Long Manufacturing Limited
Site Address:
Location Other:
Proponent Name:
Proponent Address: 6635 Ordan Road, Mississauga Ontario, L5T 1K5
Comment Period:
URL:

Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Site Location Details:

Town of Oakville TOWN OF OAKVILLE

Site: ***LONG MANUFACTURING LIMITED***
Town of Oakville ON

Database: ***EBR***

EBR Registry No: IA7E0932.D
Ministry Ref No:
Notice Type: Instrument
Notice Stage:
Notice Date:
Proposal Date: 6/24/97
Year: 1997

Decision Posted:
Exception Posted:
Section:
Act 1:
Act 2:
Site Location Map:

Instrument Type: EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)
Off Instrument Name:
Posted By:
Company Name:
Site Address:
Location Other:
Proponent Name:
Proponent Address: LONG MANUFACTURING LIMITED,656 Kerr Street,Oakville, Ontario,L6K 3E4
Comment Period:
URL:

Site Location Details:

Town of Oakville

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.***
Various Locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 0828-9DGMQK
Approval Date: 2013-11-26
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.
Address: Various Locations in Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/1381-9ALR6V-14.pdf
PDF Site Location:

Site: ***Suncor Energy Inc.***
Various Locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 3551-9CBRQP
Approval Date: 2013-10-31
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc.
Address: Various Locations in Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6352-9ADQSN-14.pdf
PDF Site Location:

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.***
Various Locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 3352-9A3GTX
Approval Date: 2013-07-30
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.
Address: Various Locations in Ontario
Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0006-94QQ48-14.pdf
PDF Site Location:

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.***
Various Locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 4635-98ULLG
Approval Date: 2013-06-24
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.
Address: Various Locations in Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/8881-94QQB7-14.pdf
PDF Site Location:

Site: ***Pauls Burloak Nomineeco Inc.***
Part of Lots 34 & 35, Concession 3 S.D.S Oakville ON

Database: ***ECA***

Approval No: 3444-8X6PLV
Approval Date: 2012-08-23
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: Pauls Burloak Nomineeco Inc.
Address: Part of Lots 34 & 35, Concession 3 S.D.S
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/4144-8WTL6H-14.pdf
PDF Site Location:

Site: ***Petro-Canada***
Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 2012-5XKM48
Approval Date: 2004-04-28
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Petro-Canada
Address:
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/7386-5WXKSB-14.pdf
PDF Site Location:

Site: ***Suncor Energy Inc.***
Various locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No: 8558-AAHJMW
Approval Date: 2016-07-22
Status: Approved
Record Type: ECA
Link Source: IDS
MOE District:
City:
Longitude:
Latitude:
Geometry X:

SWP Area Name: ***Geometry Y:***
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc.
Address: Various locations in Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/7637-A67RNM-14.pdf
PDF Site Location:

Site: ***The Regional Municipality of Halton*** ***Database:*** ***ECA***
North and South Service Rd Oakville ON L6M 3L1

Approval No: 9992-6YMQ9D ***MOE District:***
Approval Date: 2007-02-22 ***City:***
Status: Approved ***Longitude:***
Record Type: ECA ***Latitude:***
Link Source: IDS ***Geometry X:***
SWP Area Name: ***Geometry Y:***
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: The Regional Municipality of Halton
Address: North and South Service Rd
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/9614-6YLLV9-14.pdf
PDF Site Location:

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.*** ***Database:*** ***ECA***
Various locations in Ontario Oakville ON L6L 6N5

Approval No: 8007-9W2J9W ***MOE District:***
Approval Date: 2015-05-05 ***City:***
Status: Revoked and/or Replaced ***Longitude:***
Record Type: ECA ***Latitude:***
Link Source: IDS ***Geometry X:***
SWP Area Name: ***Geometry Y:***
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.
Address: Various locations in Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/8589-9KAJYF-14.pdf
PDF Site Location:

Site: ***The Regional Municipality of Halton*** ***Database:*** ***ECA***
North and South Service Rd Oakville ON L6M 3L1

Approval No: 3042-6YMQBV ***MOE District:***
Approval Date: 2007-02-22 ***City:***
Status: Approved ***Longitude:***
Record Type: ECA ***Latitude:***
Link Source: IDS ***Geometry X:***
SWP Area Name: ***Geometry Y:***
Approval Type: ECA-Municipal Drinking Water Systems
Project Type: Municipal Drinking Water Systems
Business Name: The Regional Municipality of Halton
Address: North and South Service Rd
Full Address:
Full PDF Link:
PDF Site Location:

Site: ***Dunster Investments Limited*** ***Database:*** ***ECA***
Burloak Drive and Block 9 Access Road Burlington ON M3H 5V3

Approval No:	3401-5QEKY3	***MOE District:***	
Approval Date:	2003-08-25	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-Municipal Drinking Water Systems		
Project Type:	Municipal Drinking Water Systems		
Business Name:	Dunster Investments Limited		
Address:	Burloak Drive and Block 9 Access Road		
Full Address:			
Full PDF Link:			
PDF Site Location:			

Site: ***Petro-Canada***
Various Sites Across Province of Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No:	3016-5ZBQQB	***MOE District:***	Thunder Bay
Approval Date:	2005-11-02	***City:***	
Status:	Revoked and/or Replaced	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:	Lakehead	***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Petro-Canada		
Address:	Various Sites Across Province of Ontario		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/0744-6FSHZZ-14.pdf		
PDF Site Location:			

Site: ***The Corporation of the Town of Oakville***
Wyecroft Rd Oakville ON L6H 0H3

Database: ***ECA***

Approval No:	3004-C4VQ2A	***MOE District:***	Halton-Peel
Approval Date:	2021-07-14	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	-8871178.238699999
SWP Area Name:	Halton	***Geometry Y:***	5380532.132700004
Approval Type:	ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS		
Project Type:	MUNICIPAL AND PRIVATE SEWAGE WORKS		
Business Name:	The Corporation of the Town of Oakville		
Address:	Wyecroft Rd		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/4903-C4NHZ9-14.pdf		
PDF Site Location:			

Site: ***Dunster Investments Limited***
Burloak Drive and Block 9 Access Road Burlington ON M3H 5V3

Database: ***ECA***

Approval No:	2962-5QEKCR	***MOE District:***	
Approval Date:	2003-08-25	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS		
Project Type:	MUNICIPAL AND PRIVATE SEWAGE WORKS		
Business Name:	Dunster Investments Limited		
Address:	Burloak Drive and Block 9 Access Road		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/8535-5Q6LW9-14.pdf		

PDF Site Location:

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.***
Various locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No:	8054-AWEQVH	***MOE District:***	
Approval Date:	2018-03-01	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.		
Address:	Various locations in Ontario		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/7140-AQ9KMN-14.pdf		
PDF Site Location:			

Site: ***Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.***
Various locations in Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No:	7737-9W2KCW	***MOE District:***	
Approval Date:	2015-05-05	***City:***	
Status:	Revoked and/or Replaced	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Suncor Energy Inc., Suncor Energy Products Inc., and 1277136 Alberta Ltd.		
Address:	Various locations in Ontario		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/6016-9KAJMN-14.pdf		
PDF Site Location:			

Site: ***Petro-Canada Inc.***
Various Sites Across Province of Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No:	6118-7KFR63	***MOE District:***	
Approval Date:	2008-10-17	***City:***	
Status:	Revoked and/or Replaced	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Petro-Canada Inc.		
Address:	Various Sites Across Province of Ontario		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/3172-7CTPSR-14.pdf		
PDF Site Location:			

Site: ***Petro-Canada***
Various Sites Across Province of Ontario Oakville ON L6L 6N5

Database: ***ECA***

Approval No:	3016-5ZBQQB	***MOE District:***	Thunder Bay
Approval Date:	2004-10-15	***City:***	
Status:	Revoked and/or Replaced	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:	Lakehead	***Geometry Y:***	

Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Petro-Canada
Address: Various Sites Across Province of Ontario
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/2635-5WCSPF-14.pdf
PDF Site Location:

Site: ***Database:*** ***EHS***

Burloak Dr Burlington ON

Order No: 20020919011
Status: C
Report Type: Custom Report
Report Date: 9/27/02
Date Received: 9/19/02
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection: north of Prince William Dr
Municipality:
Client Prov/State: ON
Search Radius (km): 0.45
X: -79.750026
Y: 43.388864

Site: ***SHELL CANADA LTD.*** ***Database:*** ***GEN***
PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7 OAKVILLE ON

Generator No: ON0005132
SIC Code: 3611
SIC Description: REFINED PETRO. PROD.
Approval Years: 86,87,88,89,90
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Site: ***SHELL CANADA LTD. 34-281*** ***Database:*** ***GEN***
PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7 OAKVILLE ON

Generator No: ON0005132
SIC Code: 3611
SIC Description: REFINED PETRO. PROD.
Approval Years: 92,93,94,95,96,97
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Site: ***SHELL CANADA LIMITED*** ***Database:***

PT. LOT 35, CONC.3 SDS DRAWING 467-79-3 TOWN OF OAKVILLE ON ***GEN***

Generator No: ON0005132
SIC Code: 3611
SIC Description: REFINED PETRO. PROD.
Approval Years: 98
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Site: ***CANADIAN NATIONAL RAILWAY***
VARIOUS SITES WITHIN THE MOEE CENTRAL REGION (SEE SCHEDULE "B") ON

Database: ***GEN***

Generator No: ONR000703
SIC Code: 482113
SIC Description: Mainline Freight Rail Transportation
Approval Years: 2012
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 222
Waste Class Name: HEAVY FUELS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 243
Waste Class Name: PCBS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 270
Waste Class Name: OTHER SPECIFIED ORGANICS

Waste Class: 114
Waste Class Name: OTHER INORGANIC ACID WASTES

Waste Class: 231
Waste Class Name: LATEX WASTES

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

Waste Class: 266
Waste Class Name: PHENOLIC WASTES

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 268
Waste Class Name: AMINES

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 135
Waste Class Name: REACTIVE ANION WASTES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 254
Waste Class Name: TRANSFER STATION OILS WASTES

Site: ***CANADIAN NATIONAL RAILWAY***
VARIOUS SITES WITHIN THE MOEE CENTRAL REGION (SEE SCHEDULE "B") ON

Database: ***GEN***

Generator No: ONR000703
SIC Code: 482113
SIC Description: MAINLINE FREIGHT RAIL TRANSPORTATION
Approval Years: 2013

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 243
Waste Class Name: PCBS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 262
Waste Class Name: DETERGENTS/SOAPS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 266
Waste Class Name: PHENOLIC WASTES

Waste Class: 253
Waste Class Name: EMULSIFIED OILS

Waste Class: 135
Waste Class Name: REACTIVE ANION WASTES

Waste Class: 268
Waste Class Name: AMINES

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 254
Waste Class Name: TRANSFER STATION OILS WASTES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 270
Waste Class Name: OTHER SPECIFIED ORGANICS

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 114
Waste Class Name: OTHER INORGANIC ACID WASTES

Waste Class: 222
Waste Class Name: HEAVY FUELS

Waste Class: 231
Waste Class Name: LATEX WASTES

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Site: ***Oakville Refinery Shell Canada Town of Oakville***
Lot 35, Concession 3 Halton ON

Database: ***LIMO***

ECA/Instrument No: A210407
Operation Status: Closed
C of A Issue Date:
C of A Issued to:
Lndfl Gas Mgmt (P):
Lndfl Gas Mgmt (F):
Lndfl Gas Mgmt (E):
Lndfl Gas Mgmt Sys:
Landfill Gas Mntr:
Leachate Coll Sys:
ERC Est Vol (m3):
ERC Volume Unit:
ERC Dt Last Det:
Landfill Type:
Source File Type:
Fill Rate:
Fill Rate Unit:
Tot Fill Area (ha):
Tot Site Area (ha):
Footprint:
Tot Apprv Cap (m3):
Contam Atten Zone:
Grndwtr Mntr:
Surf Wtr Mntr:
Air Emis Monitor:
Approved Waste Type:
Client Site Name:
ERC Methodology:
Site Name: Oakville Refinery
Shell Canada
Town of Oakville
Site Location Details:

Natural Attenuation:
Liners:
Cover Material:
Leachate Off-Site:
Leachate On Site:
Req Coll Lndfill Gas:
Lndfill Gas Coll:
Total Waste Rec:
TWR Methodology:
TWR Unit:
Tot Aprv Cap Unit:
Financial Assurance:
Last Report Year:
Region:
District Office:
Site County:
Lot:
Concession:
Latitude:
Longitude:
Easting:
Northing:
UTM Zone:
Data Source:

Service Area:
Page URL:

Site: ***SANEXEN ENVIRONMENTAL SERVICES INC.***
TRANS-NORTHERN PIPELINES INC. OAKVILLE PUMP & METER STN.,BURLOAK DR. OAKVILLE ON

Database: ***REC***

ID:		***Province In:***	ONTARIO
Company ID:		***Province Out:***	
Receiver No:	A680160	***County Out:***	
Co Admin:		***Mail Addr:***	
Choice of Contact:		***Site PO Box:***	
Rec Div:			
Rec Op Div:			
Rec Op Name:			
Site Bldg:			
Facility Type:	RECLAIMER/REUSE, PCB DESTRUCTION FACILITY		
Approval Yrs:	1995; 1996; 1997; 1998; 2006; 2007; 2008		

Site: ***PETRO-CANADA***
TANK TRUCK (CARGO) OAKVILLE TOWN ON

Database: ***SPL***

Ref No:	367	***Municipality No:***	14403
Year:		***Nature of Damage:***	
Incident Dt:	2/5/1988	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	2/5/1988	***Health/Env Conseq:***	
Dt Document Closed:		***Agency Involved:***	
Site No:			
Facility Name:			
MOE Response:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:			
Easting:			
Incident Cause:	PIPE/HOSE LEAK		
Incident Event:			
Environment Impact:			
Nature of Impact:			
Contaminant Qty:			
System Facility Address:			
Client Name:			
Client Type:			
Call Report Locatn Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND		
Receiving Environment:			
Incident Reason:	EQUIPMENT FAILURE		
Incident Summary:	GASOLINE TO GROUND AT SERVICE STATION.		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:			
SAC Action Class:			

Source Type:

Site: ***PETRO-CANADA***
SERVICE STATION OAKVILLE TOWN ON

Database: ***SPL***

Ref No:	99118	***Municipality No:***	14403
Year:		***Nature of Damage:***	
Incident Dt:	2/7/1994	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	2/7/1994	***Health/Env Conseq:***	
Dt Document Closed:		***Agency Involved:***	MCCR, REGION,TOWN
Site No:			
Facility Name:			
MOE Response:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Site Lot:			
Site Conc:			
Site Geo Ref Accu:			
Site Map Datum:			
Northing:			
Easting:			
Incident Cause:	UNDERGROUND TANK LEAK		
Incident Event:			
Environment Impact:	CONFIRMED		
Nature of Impact:	Multi Media Pollution		
Contaminant Qty:			
System Facility Address:			
Client Name:			
Client Type:			
Call Report Locatn Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND		
Receiving Environment:			
Incident Reason:	UNKNOWN		
Incident Summary:	PETRO-CANADA - 3200L OF GASOLINE TO SANITARY SEWER		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:			
SAC Action Class:			
Source Type:			

Site:
at Harvester Rd Burlington ON

Database: ***SPL***

Ref No:	5755-8M4LLW	***Municipality No:***	
Year:		***Nature of Damage:***	
Incident Dt:	9/27/2011	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	9/27/2011	***Health/Env Conseq:***	
Dt Document Closed:		***Agency Involved:***	
Site No:			
Facility Name:			
MOE Response:			
Site County/District:			

Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name: Tuck Creek:<UNOFFICIAL>
Site Address: at Harvester Rd
Site Region:
Site Municipality: Burlington
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause: Other Discharges
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Surface Water Pollution
Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment:
Incident Reason:
Incident Summary: Tuck Creek: sheen on water, strong odour
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Unknown
SAC Action Class: Watercourse Spills
Source Type:

Site: ***PETRO-CANADA***
BULK PLANT/TERMINAL OAKVILLE TOWN ON

Database: ***SPL***

Ref No: 75787
Year:
Incident Dt: 9/5/1992
Dt MOE Arvl on Scn:
MOE Reported Dt: 9/5/1992
Dt Document Closed:
Site No:
Facility Name:
MOE Response:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:
Site Region:
Site Municipality: OAKVILLE TOWN
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause: VALVE/FITTING LEAK OR FAILURE
Incident Event:
Environment Impact: NOT ANTICIPATED

Municipality No: 14403
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:

Nature of Impact:
Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: EQUIPMENT FAILURE
Incident Summary: PETRO-CANADA BULK PLANT - 30 L OF FURNACE OIL TO GROUND AT RACK
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

Site: ***CANADIAN NATIONAL RAILWAY***
CNR YARD. TRAIN OAKVILLE TOWN ON

Database: ***SPL***

Ref No: 147257
Year:
Incident Dt: 10/1/1997
Dt MOE Arvl on Scn:
MOE Reported Dt: 10/1/1997
Dt Document Closed:
Site No:
Facility Name:
MOE Response:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:
Site Region:
Site Municipality: OAKVILLE TOWN
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause: UNKNOWN
Incident Event:
Environment Impact: POSSIBLE
Nature of Impact: Soil contamination
Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: UNKNOWN
Incident Summary: CANADIAN NATIONAL RAILWAY-DIESEL SPRAYED ON TRACKSUNION STATION-OAKVILLE.
Activity Preceding Spill:

Municipality No: 14403
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved: HALTON REG.

Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

Site: ***PETRO-CANADA***
TANK TRUCK (CARGO) OAKVILLE TOWN ON

Database: ***SPL***

Ref No:	152541	***Municipality No:***	14403
Year:		***Nature of Damage:***	
Incident Dt:	2/17/1998	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	2/17/1998	***Health/Env Conseq:***	
Dt Document Closed:		***Agency Involved:***	

Site No:
Facility Name:
MOE Response:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:
Site Region:
Site Municipality: OAKVILLE TOWN
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:
Incident Cause: CONTAINER OVERFLOW
Incident Event:
Environment Impact: POSSIBLE
Nature of Impact: Soil contamination
Contaminant Qty:
System Facility Address:
Client Name:
Client Type:
Call Report Locatn Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: UNKNOWN
Incident Summary: PETRO CANADA-UKN QTY BUNKER OIL TO ASPHALT ,DYKED WITH SAND.
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:

Site: ***Suncor Energy Inc.***
Burlington ON

Database: ***SPL***

Ref No:	1818-8GCHYZ	***Municipality No:***	
Year:		***Nature of Damage:***	
Incident Dt:	4/28/2011	***Discharger Report:***	
Dt MOE Arvl on Scn:		***Material Group:***	
MOE Reported Dt:	4/28/2011	***Health/Env Conseq:***	
Dt Document Closed:	5/19/2011	***Agency Involved:***	

Site No:	
Facility Name:	
MOE Response:	No Field Response
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	
Nearest Watercourse:	
Site Name:	Corner of Appleby and Dundas<UNOFFICIAL>
Site Address:	
Site Region:	
Site Municipality:	Burlington
Site Lot:	
Site Conc:	
Site Geo Ref Accu:	
Site Map Datum:	
Northing:	
Easting:	
Incident Cause:	Other Transport Accident
Incident Event:	
Environment Impact:	Confirmed
Nature of Impact:	Soil Contamination
Contaminant Qty:	7000 L
System Facility Address:	
Client Name:	Suncor Energy Inc.
Client Type:	
Call Report Locatn Geodata:	
Contaminant Code:	12
Contaminant Name:	GASOLINE
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	
Receiving Environment:	
Incident Reason:	Spill
Incident Summary:	SIMULATION: Suncor spill of 7000 L of gasoline to road/land
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Tank Truck
SAC Action Class:	Land Spills
Source Type:	

Site:
lot 1 con 3 ON

Database: ***WWIS***

Well ID:	7415038	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:		***Data Entry Status:***	Yes
Use 2nd:		***Data Src:***	
Final Well Status:		***Date Received:***	03/21/2022
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z382645	***Contractor:***	6946
Tag:	A347209	***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	001
Depth to Bedrock:		***Concession:***	03
Well Depth:		***Concession Name:***	DS S
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1009006235	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	609623.00
Code OB Desc:		***North83:***	4816608.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	03/07/2022	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Provincial AAGR

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

The Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (ONDMNRF) maintains this database of pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Oct 2022

Abandoned Mine Information System: Provincial AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Mar 2022

Anderson's Waste Disposal Sites: Private ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks: Provincial AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies: Private AUWR

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-Feb 28, 2022

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

Certificates of Approval: Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities: Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Government Publication Date: Jan 2004-Dec 2021

Commercial Fuel Oil Tanks: Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.
Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Chemical Manufacturers and Distributors: Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

Chemical Register: Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

Government Publication Date: 1999-Feb 28, 2023

Compressed Natural Gas Stations: Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 -Aug 2023

Inventory of Coal Gasification Plants and Coal Tar Sites: Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions: Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Sep 2023

Certificates of Property Use: Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994 - Aug 31, 2023

Drill Hole Database: Provincial DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Oct 2022

Delisted Fuel Tanks: Provincial DTNK

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: Feb 28, 2022

Environmental Activity and Sector Registry: Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Government Publication Date: Oct 2011- Aug 31, 2023

Environmental Registry: Provincial EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994 - Aug 31, 2023

Environmental Compliance Approval: Provincial ECA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011- Aug 31, 2023

Environmental Effects Monitoring: Federal EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Jun 30, 2023

Environmental Issues Inventory System: Federal EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Apr 30, 2022

Environmental Penalty Annual Report: Provincial EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2022

List of Expired Fuels Safety Facilities: Provincial EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Jun 2023

Fisheries & Oceans Fuel Tanks: Federal FOFT

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

Federal Identification Registry for Storage Tank Systems (FIRSTS): Federal FRST

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank: Provincial FST

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Fuel Storage Tank - Historic: Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Oct 31, 2022

Greenhouse Gas Emissions from Large Facilities: Federal GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2020

TSSA Historic Incidents: Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks: Provincial INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing in a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Mar 21, 2022

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Feb 2023

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2021

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Oct 2022

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Jun 30, 2021

National Energy Board Wells: Federal NEBP

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008*

National Pollutant Release Inventory 1993-2020: Federal NPR2

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals, and transfers for recycling. The inventory, managed by Environment and Climate Change Canada, tracks over 300 substances. Under the authority of the Canadian Environmental Protection Act (CEPA), owners or operators of facilities that meet published reporting requirements are required to report to the NPRI.

Government Publication Date: Sep 2020

National Pollutant Release Inventory - Historic: Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances. This data holds historic records; current records are found in NPR2.

Government Publication Date: 1993-May 2017

Oil and Gas Wells: Private OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Aug 31, 2023

Ontario Oil and Gas Wells: Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Aug 2023

Inventory of PCB Storage Sites: Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994 - Aug 31, 2023

Canadian Pulp and Paper: Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

Parks Canada Fuel Storage Tanks: Federal PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011- Aug 31, 2023

NPRI Reporters - PFAS Substances: Federal PFCH

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per - and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This listing of PFAS substance reporters includes those NPRI facilities that reported substances that are found in either: a) the Comprehensive Global Database of PFASs compiled by the Organisation for Economic Co-operation and Development (OECD), b) the US Environmental Protection Agency (US EPA) Master List of PFAS Substances, c) the US EPA list of PFAS chemicals without explicit structures, or d) the US EPA list of PFAS structures (encompassing the largest set of structures having sufficient levels of fluorination to potentially impart PFAS-type properties).

Government Publication Date: Sep 2020

Potential PFAS Handers from NPRI: Federal PFHA

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per - and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This list of potential PFAS handlers includes those NPRI facilities that reported business activity (NAICS code) included in the US Environmental Protection Agency (US EPA) list of Potential PFAS-Handling Industry Sectors, further described as operating in industry sectors where literature reviews indicate that PFAS may be handled and/or released. Inclusion of a facility in this listing does not indicate that PFAS are being manufactured, processed, used, or released by the facility - these are facilities that potentially handle PFAS based on their industrial profile.

Government Publication Date: Sep 2020

Pipeline Incidents: Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2021

Private and Retail Fuel Storage Tanks: Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994 - Aug 31, 2023

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2021

Record of Site Condition: Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.
RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Aug 2023

Retail Fuel Storage Tanks: Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Feb 28, 2023

Scott's Manufacturing Directory: Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Ontario Spills: Provincial SPL

List of spills and incidents made available by the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X. The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests. This database includes spill incidents that occurred in March, May, June-October 2022, and January 2023 in addition to those listed in the Government Publication Date.

Government Publication Date: 1988-Dec 2021; see description

Wastewater Discharger Registration Database: Provincial SRDS

Facilities that report either municipal treated wastewater effluent or industrial wastewater discharges under the Effluent Monitoring and Effluent Limits (EMEL) and Municipal/Industrial Strategy for Abatement Regulations. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment keeps record of direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation, Mining, Petroleum Refining, Organic Chemicals, Inorganic Chemicals, Pulp & Paper, Metal Casting, Iron & Steel, and Quarries.

Government Publication Date: 1990-Dec 31, 2020

Anderson's Storage Tanks: Private TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks: Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970 - Apr 2023

Variances for Abandonment of Underground Storage Tanks: Provincial VAR

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.
Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011- Aug 31, 2023

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Mar 31 2023

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

HISTORICAL AERIALS

Project Property: 845 Burloak Drive, Oakville
845 Burloak Drive
Oakville ON L6L 6V9

Project No: CT3959.00

Requested By: Terrapex Environmental Ltd.

Order No: 23121800459

Date Completed: December 20,2023

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
2022	Maxar Technologies	10,000	
1979	National Air Photo Library	10,000	
1965	National Air Photo Library	10,000	

Year: 2022
Source: MAXAR
Scale: 10,000
Comment:

Address: 845 Burloak Drive, Oakville, ON
Approx Center: -79.7512892,43.392196

Order No: 23121800459

ERIS

Year: 1979
Source: NAPL
Scale: 10,000
Comment:

Address: 845 Burloak Drive, Oakville, ON
Approx Center: -79.7512892,43.392196

Order No: 23121800459

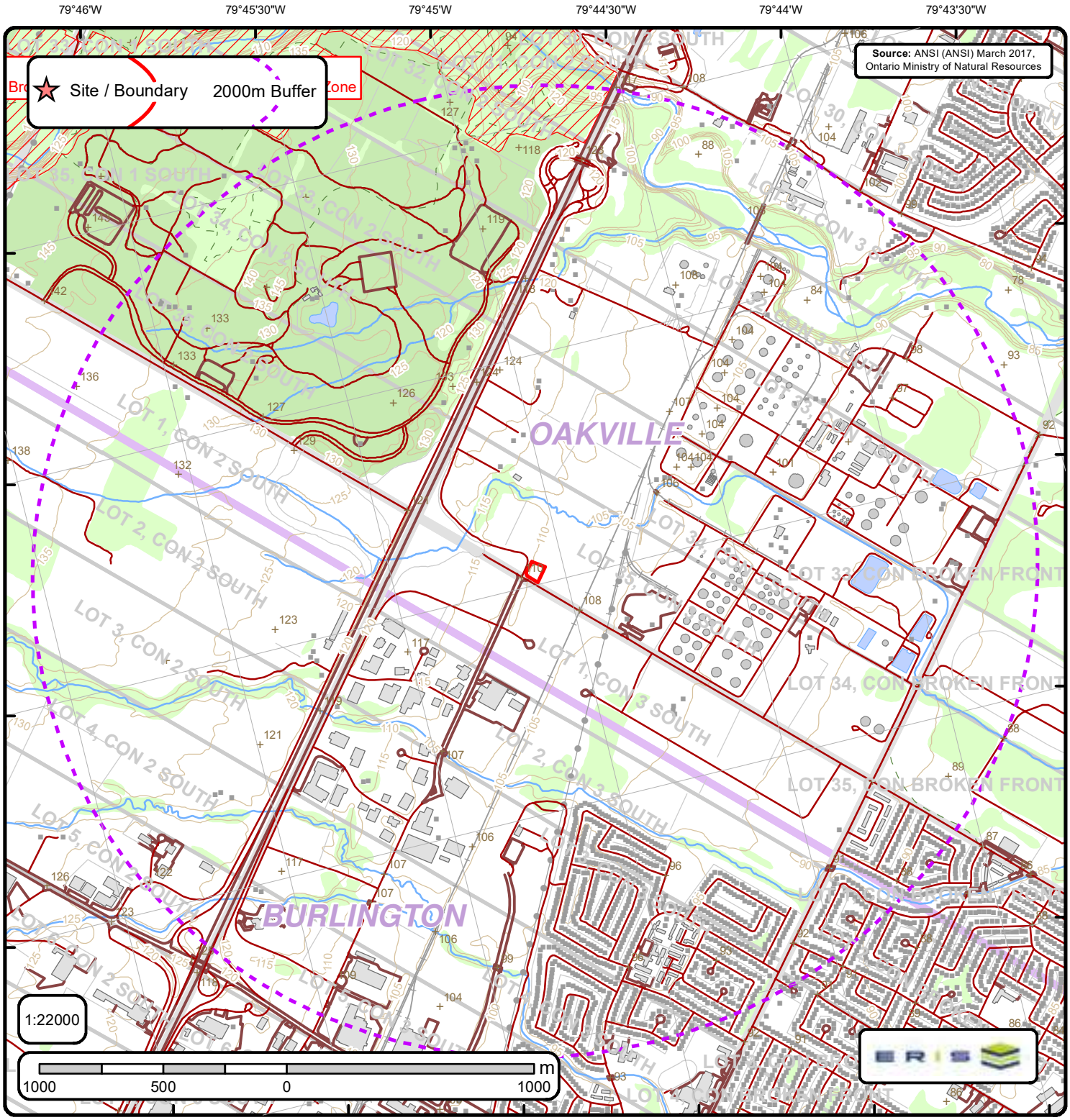
ERIS

Year: 1965
Source: NAPL
Scale: 10,000
Comment:

Address: 845 Burloak Drive, Oakville, ON
Approx Center: -79.7512892,43.392196

Order No: 23121800459

ERIS



Area of Natural & Scientific Interest (ANSI) Order No. 23102300496

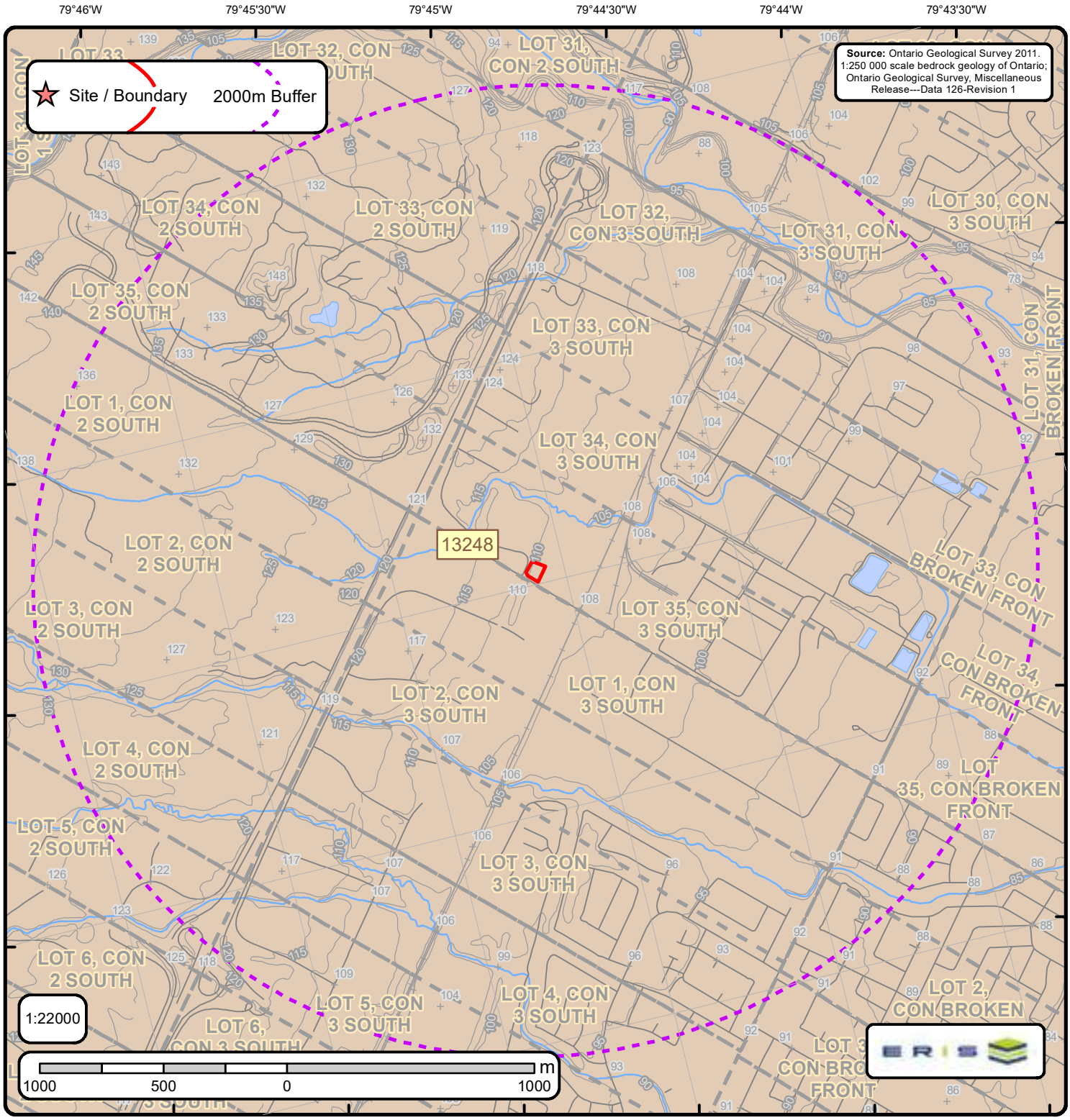
- Spot Height
- Building Point
- Towers
- Utility Site Point
- Misc. Line
- Railroads
- Roads
- Trail
- Transportation Structure
- Utility Line
- Water Structure
- Drainage Line Feature
- River or Stream
- Airports
- Tanks
- Building to Scale
- Contour Line
- Pit or Quarry
- Waterbody
- Wetlands
- Concession
- Lots
- Municipalitiy
- Land Ownership
- Wooded Area
- Conservation Authority
- Conservation Area
- Municipal Park
- Provincial Park
- National Park
- Nature Reserve
- ANSI Area

ANSI Report

ANSI Units Found within 2000 m of
845 Burloak Dr

Order No.
23102300496

ANSI Name: Bronte Creek Provincial Park Nature Reserve Zone
ID: 1200808503 | **Type:** ANSI, Life Science | **Significance:** Provincial | **Management Plan:** Yes | **Area (sqm):** 1949492.534 |
Comments: This mapping represents external boundries only. Reference should be made to the individual ANSI file for the ANSI inventory (planning section MNR Aurora). Less accurate mapping is available on 1:50,000 white prints?.followed by NHIC'S ANSI 'description'



Bedrock Geology of Ontario

Order No. 23102300496

Spot Height
Roads
Contour Lines
Streams
Railroads
Lots
Pit or Quarry
Airports
Waterbody
Wetlands

Bedrock Geology Lines

- CONTACT, GEOPHYSICAL, TREND, INTERPRETED
- CONTACT, SHARP, TREND, INTERPRETED
- CONTACT, SHARP, TREND, OBSERVED
- FAULT, DEXTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, PROJECTED FAULT, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- NEATLINE
- ONTARIO BORDER
- Marble, chert, iron formation, minor metavolcanic rocks

Dikes

- Abitibi mafic dike
- Biscotasing mafic dike
- Empey Lake mafic dike
- Felsic to intermediate intrusive rocks
- Fort Frances mafic dike
- Frontenac mafic dike
- Grenville mafic dike
- Logan and Nipigon mafic sills
- Mackenzie mafic dike
- Mafic dikes of uncertain age
- Mafic sills and dikes
- Marathon mafic dike
- Marathon, Kapuskasing or Biscotasing mafic dike
- Matachewan mafic dike
- Mine Centre mafic dike
- Molson mafic dike
- North Channel mafic dike
- Pickle Crow mafic dike (Molson swarm) normal
- Pickle Crow mafic dike (Molson swarm) reverse
- Rideau mafic dike
- Sudbury mafic dike
- Ultramafic, gabbroic and granophyric intrusions
- Unsubdivided mafic dike
- Unsubdivided mafic dike (Keweenawan age)
- unknown

C Lines

- FOLD, ANTICLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, ANTICLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, ANTICLINE, SYNFORMAL, INTERPRETED, SECOND GENERATION
- FOLD, ANTIFORM, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, SYNFORM, INTERPRETED, UNKNOWN GENERATION

Kimberlite

Bedrock Geology Report

Bedrock Geology units found within 2000 m of

845 Burloak Dr

Order No.
23102300496

ID: 13248 | **Unit Name:** |
Type (All): 55a | **Type (Primary):** 55a | **Type (Secondary):** | **Type (Tertiary):** | **Rock Type (Primary):** Shale, limestone, dolostone, siltstone | **Strata (Primary):** Queenston Formation | **Super Eon (Primary):** | **Eon (Primary):** PHANEROZOIC (Present to 542.0 Ma) | **Era (Primary):** PALEOZOIC (251.0 Ma to 542.0 Ma) | **Period (Primary):** ORDOVICIAN (443.7 Ma to 488.3 Ma) | **Epoch (Primary):** UPPER ORDOVICIAN | **Province (Primary):**

Bedrock Geology Report Metadata

Ontario Geological Survey 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release-Data 126 Revision1

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY

ID - Unit ID **Unit Name** - Generalized geological unit classification

Type (All) - The geological unit number(s) or code(s) for all rock types present in an individual polygon.

Type (Primary) - The primary geological unit number or code for the primary rock type in an individual polygon

Type (Secondary) - The secondary geological unit number or code for the secondary rock type, if present, in an individual polygon

Type (Tertiary) - The tertiary geological unit number or code for the tertiary rock type, if present, in an individual polygon

Rock Type (Primary) - Rock type or sub-unit description

Status (Primary) - The Stratigraphic unit. Divided into:

```
Supergroup (two or more groups and lone formations)
Group (two or more formations)
Formation (primary unit of lithostratigraphy)
Member (named lithologic subdivision of a formation)
Bed (named distinctive layer in a member or formation)
```

Super Eon (Primary) - A name given to the largest defined unit of geological time, divided into Eons. Unique values which this field may contain (Domains) are:

```
PRECAMBRIAN (0.542 Ga to <3.85 Ga)
```

Eon (Primary) - A name given to a defined unit of geological time, divided into Eras. Unique values which this field may contain (Domains) are:

```
ARCHEAN (2.5 Ga to <3.85 Ga)
PROTEROZOIC (0.542 Ga to 2.50 Ga)
PHANEROZOIC (Present to 542.0 Ma)
```

Era (Primary) - A name given to a defined unit of geological time, divided into Periods. Each era on the scale is separated from the next by a major event or change. Unique values which this field may contain (Domains) are:

```
MESOARCHEAN (2.8 Ga to 3.2 Ga)
NEO-TO MESOARCHEAN (2.5 Ga to 3.2 Ga)
NEOARCHEAN (2.5 Ga to 2.8 Ga)
PALEOPROTEROZOIC (1.6 Ga to 2.5 Ga)
MESO-TO PALEOPROTEROZOIC (1.0 Ga to 2.5 Ga)
MESOPROTEROZOIC (1.0 Ga to 1.6 Ga)
EARLY PALEOZOIC TO NEOPROTEROZOIC (443.7 Ma to 1.0 Ga)
NEO-TO MESOPROTEROZOIC (0.542 Ga to 1.6 Ga)
PALEOZOIC (251.0 Ma to 542.0 Ma)
MESOZOIC (65.5 Ma to 251.0 Ma)
```

Period (Primary) - A name given to a defined unit of geological time, divided into Epochs. Unique values which this field may contain (Domains) are:

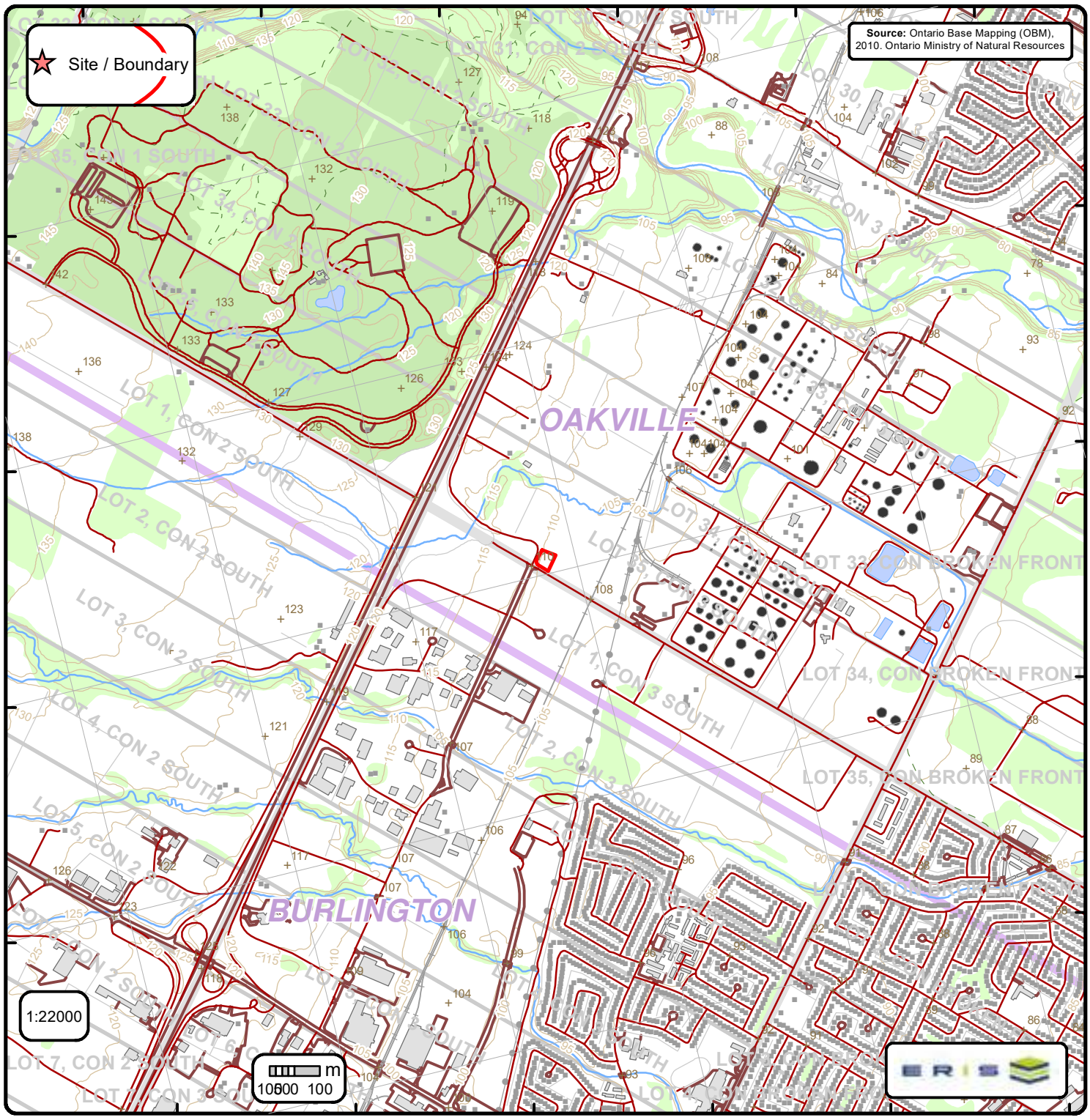
```
CAMBRIAN (488.3 Ma to 542.0 Ma)
ORDOVICIAN (443.7 Ma to 488.3 Ma)
SILURIAN (416.0 Ma to 443.7 Ma)
DEVONIAN (359.2 Ma to 416.0 Ma)
MISSISSIPPIAN TO DEVONIAN (318.1 Ma to 416.0 Ma)
JURASSIC (145.5 Ma to 199.6 Ma)
CRETACEOUS AND JURASSIC (65.5 Ma to 199.6 Ma)
```

Epoch (Primary) - A name given to a defined unit of geological time. Unique values which this field may contain (Domains) are:

```
LOWER ORDOVICIAN
MIDDLE ORDOVICIAN
UPPER ORDOVICIAN
MIDDLE AND LOWER SILURIAN
UPPER SILURIAN TO LOWER DEVONIAN
UPPER SILURIAN
LOWER DEVONIAN
MIDDLE DEVONIAN
UPPER DEVONIAN
LOWER CRETACEOUS AND MIDDLE JURASSIC
```

Province (Primary) - The Geological Province the geological unit is in. Unique values which this field may contain (Domains) are:

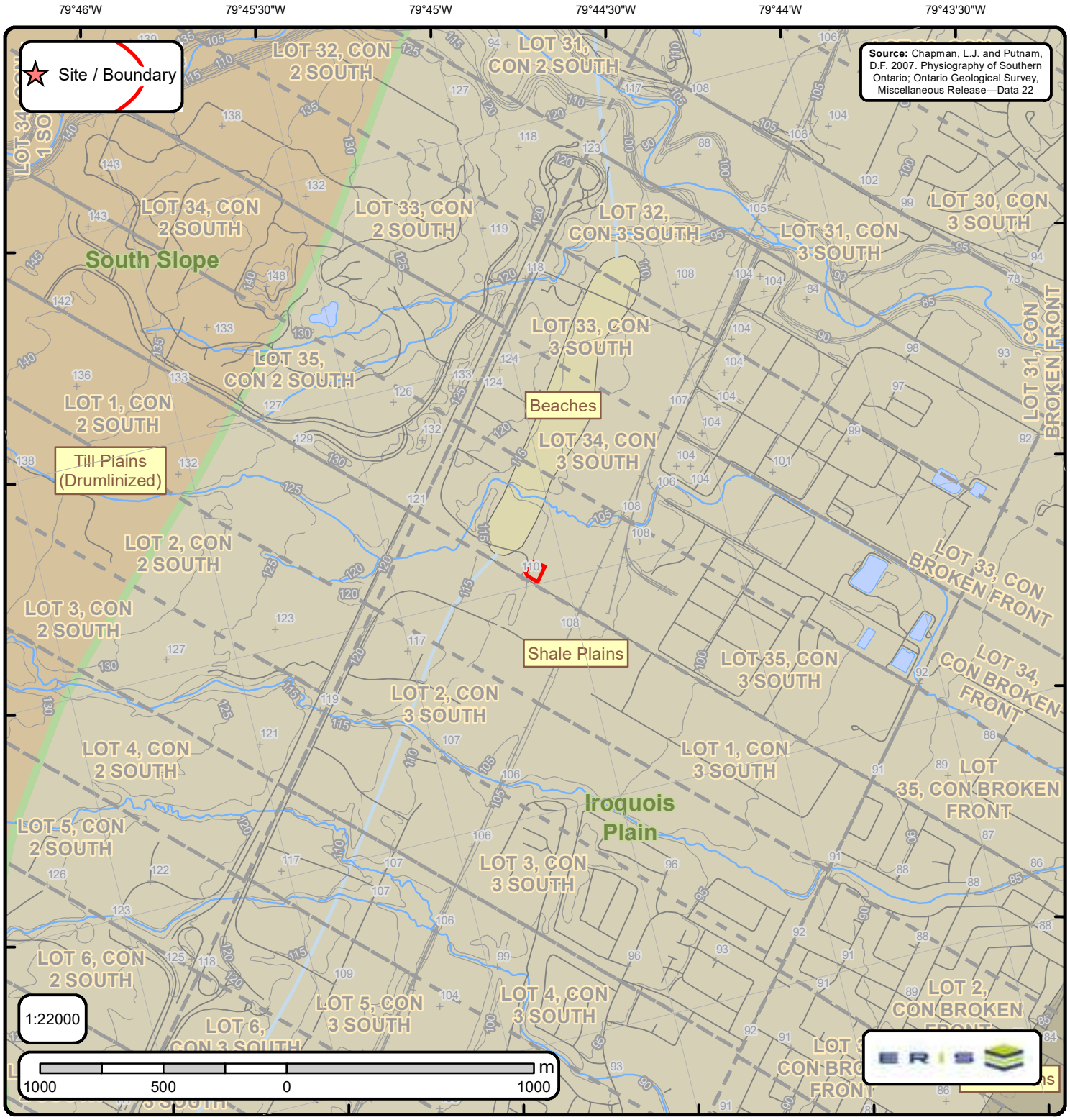
```
SUPERIOR
SOUTHERN
SUPERIOR
GRENVILLE
```



Ontario Base Mapping (OBM) Data

Order No. 23102300496

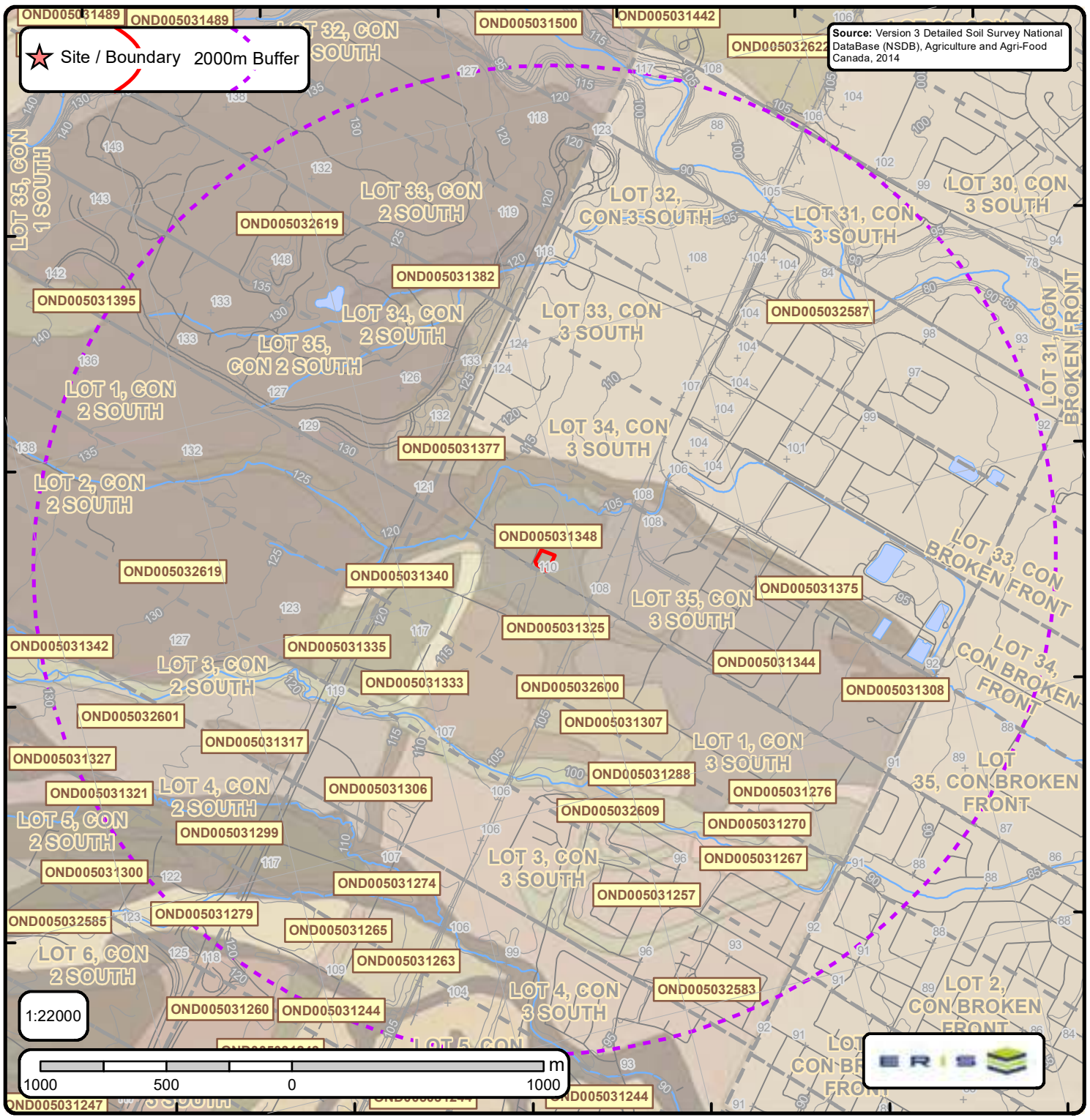
- Spot Height (metre)
- Building Point
- Towers
- Utility Site Point
- Misc. Line
- Railroads
- Roads
- Trail
- Transportation Structure
- Utility Line
- Water Structure
- Drainage Line Feature
- River or Stream
- Airports
- Tanks
- Building to Scale
- Contour Line
- Pit or Quarry
- Waterbody
- Wetlands
- Concession
- Lots
- Municipalitiy
- Land Ownership
- Wooded Area
- Conservation Authority
- Conservation Area
- Municipal Park
- Provincial Park
- National Park
- Nature Reserve



Physiography of Southern Ontario

Order No. 23102300496

- Spot Height
- Roads
- Railroads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody
- Boulder Pavement
- Dissected Terrain
- Mud Flow Scars
- Sand Dunes
- escarpment
- shorecliff
- shorecliff (weakly developed)
- Physiography Regions
- Bare Rock Ridges And Shallow Till
- Beaches
- Bevelled Till Plains
- Clay Plains
- Drumlins
- Escarpments
- Eskers
- Kame Moraines
- Limestone Plains
- Peat And Muck
- Sand Plains
- Shale Plains
- Shallow Till And Rock Ridges
- Spillways
- Till Moraines
- Till Plains (Drumlinized)
- Till Plains (Undrumlinized)



Detailed Soil Survey (ON Soils)

Order No. 23102300496

- Spot Height
- Railroads
- Roads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Order No.
23102300496

Soil ID: OND005031299
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031395
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031306
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONFOT~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses | **Second CLI Limitation Subclass** : Presence of adverse Topography | **Depth(cm)** : 0-21 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 36 | **Total Silt(%)** : 47 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.86 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-27 | **Horizon** : Bmk | **Layer No** : 2 | **Very Fine Sand(%)** : 15 | **Total Sand(%)** : 73 | **Total Silt(%)** : 21 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 4.52 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-33 | **Horizon** : BCk | **Layer No** : 3 | **Very Fine Sand(%)** : 12 | **Total Sand(%)** : 78 | **Total Silt(%)** : 18 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-100 | **Horizon** : Ck | **Layer No** : 4 | **Very Fine Sand(%)** : 2 | **Total Sand(%)** : 91 | **Total Silt(%)** : 8 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 7.785 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031500
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : None | **Slop Length(m)** : -9 | **Drainage** : Not Applicable | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : No capability for agriculture. | **First CLI Limitation Subclass** : Subject to occasional flooding (Inundation) from adjacent streams or waterbodies | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soil ID: OND005032609
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031260
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005032601
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032600
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031275
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONFOT~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses | **Second CLI Limitation Subclass** : Presence of adverse Topography | **Depth(cm)** : 0-21 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 36 | **Total Silt(%)** : 47 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.86 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-27 | **Horizon** : Bmk | **Layer No** : 2 | **Very Fine Sand(%)** : 15 | **Total Sand(%)** : 73 | **Total Silt(%)** : 21 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 4.52 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-33 | **Horizon** : BCk | **Layer No** : 3 | **Very Fine Sand(%)** : 12 | **Total Sand(%)** : 78 | **Total Silt(%)** : 18 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-100 | **Horizon** : Ck | **Layer No** : 4 | **Very Fine Sand(%)** : 2 | **Total Sand(%)** : 91 | **Total Silt(%)** : 8 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 7.785 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031274
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031276
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONBAY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 61 | **Total Silt(%)** : 27 | **Total Clay(%)** : 12 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 3.143 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-28 | **Horizon** : Aegj | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 63 | **Total Silt(%)** : 23 | **Total Clay(%)** : 14 | **Organic Carbon(%)** : 1.0 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.547 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 28-41 | **Horizon** : Btjg | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 65 | **Total Silt(%)** : 20 | **Total Clay(%)** : 15 | **Organic Carbon(%)** : 1.1 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.3 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 41-100 | **Horizon** : Ckgj | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 62 | **Total Silt(%)** : 25 | **Total Clay(%)** : 13 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 1.427 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031271
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031270
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONGMY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : 0-23 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 33 | **Total Sand(%)** : 74 | **Total Silt(%)** : 20 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 1.5 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 5.067 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-60 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 37 | **Total Sand(%)** : 76 | **Total Silt(%)** : 19 | **Total Clay(%)** : 5 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.252 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 60-95 | **Horizon** : Bt | **Layer No** : 3 | **Very Fine Sand(%)** : 35 | **Total Sand(%)** : 76 | **Total Silt(%)** : 13 | **Total Clay(%)** : 11 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 2.328 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 95-115 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 66 | **Total Sand(%)** : 68 | **Total Silt(%)** : 22 | **Total Clay(%)** : 10 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 2.288 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031257
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031375
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031377
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031279
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032587
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : None | **Slop Length(m)** : -9 | **Drainage** : Not Applicable | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : None | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031340
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031333
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONFOT~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses | **Second CLI Limitation Subclass** : Presence of adverse Topography | **Depth(cm)** : 0-21 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 36 | **Total Silt(%)** : 47 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.86 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-27 | **Horizon** : Bmk | **Layer No** : 2 | **Very Fine Sand(%)** : 15 | **Total Sand(%)** : 73 | **Total Silt(%)** : 21 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 4.52 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-33 | **Horizon** : BCk | **Layer No** : 3 | **Very Fine Sand(%)** : 12 | **Total Sand(%)** : 78 | **Total Silt(%)** : 18 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-100 | **Horizon** : Ck | **Layer No** : 4 | **Very Fine Sand(%)** : 2 | **Total Sand(%)** : 91 | **Total Silt(%)** : 8 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 7.785 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031288
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONGMY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : 0-23 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 33 | **Total Sand(%)** : 74 | **Total Silt(%)** : 20 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 1.5 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 5.067 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-60 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 37 | **Total Sand(%)** : 76 | **Total Silt(%)** : 19 | **Total Clay(%)** : 5 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.252 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 60-95 | **Horizon** : Bt | **Layer No** : 3 | **Very Fine Sand(%)** : 35 | **Total Sand(%)** : 76 | **Total Silt(%)** : 13 | **Total Clay(%)** : 11 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 2.328 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 95-115 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 66 | **Total Sand(%)** : 68 | **Total Silt(%)** : 22 | **Total Clay(%)** : 10 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 2.288 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031382
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032583
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031285
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONGMY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : 0-23 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 33 | **Total Sand(%)** : 74 | **Total Silt(%)** : 20 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 1.5 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 5.067 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-60 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 37 | **Total Sand(%)** : 76 | **Total Silt(%)** : 19 | **Total Clay(%)** : 5 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.252 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 60-95 | **Horizon** : Bt | **Layer No** : 3 | **Very Fine Sand(%)** : 35 | **Total Sand(%)** : 76 | **Total Silt(%)** : 13 | **Total Clay(%)** : 11 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 2.328 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 95-115 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 66 | **Total Sand(%)** : 68 | **Total Silt(%)** : 22 | **Total Clay(%)** : 10 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 2.288 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031308
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031335
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032619
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031307
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONBAY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 61 | **Total Silt(%)** : 27 | **Total Clay(%)** : 12 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 3.143 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-28 | **Horizon** : Aegj | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 63 | **Total Silt(%)** : 23 | **Total Clay(%)** : 14 | **Organic Carbon(%)** : 1.0 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.547 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 28-41 | **Horizon** : Btjg | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 65 | **Total Silt(%)** : 20 | **Total Clay(%)** : 15 | **Organic Carbon(%)** : 1.1 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.3 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 41-100 | **Horizon** : Ckgj | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 62 | **Total Silt(%)** : 25 | **Total Clay(%)** : 13 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 1.427 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031267
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONBAY~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 61 | **Total Silt(%)** : 27 | **Total Clay(%)** : 12 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 3.143 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-28 | **Horizon** : Aegj | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 63 | **Total Silt(%)** : 23 | **Total Clay(%)** : 14 | **Organic Carbon(%)** : 1.0 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.547 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 28-41 | **Horizon** : Btjg | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 65 | **Total Silt(%)** : 20 | **Total Clay(%)** : 15 | **Organic Carbon(%)** : 1.1 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.3 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 41-100 | **Horizon** : Ckgj | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 62 | **Total Silt(%)** : 25 | **Total Clay(%)** : 13 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 1.427 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031344
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
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Soil ID: OND005031321
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031249
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONFOT~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses | **Second CLI Limitation Subclass** : Presence of adverse Topography | **Depth(cm)** : 0-21 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 36 | **Total Silt(%)** : 47 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.86 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-27 | **Horizon** : Bmk | **Layer No** : 2 | **Very Fine Sand(%)** : 15 | **Total Sand(%)** : 73 | **Total Silt(%)** : 21 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 4.52 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-33 | **Horizon** : BCk | **Layer No** : 3 | **Very Fine Sand(%)** : 12 | **Total Sand(%)** : 78 | **Total Silt(%)** : 18 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-100 | **Horizon** : Ck | **Layer No** : 4 | **Very Fine Sand(%)** : 2 | **Total Sand(%)** : 91 | **Total Silt(%)** : 8 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 7.785 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031325
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
845 Burloak Dr

Soil ID: OND005031317
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031244
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

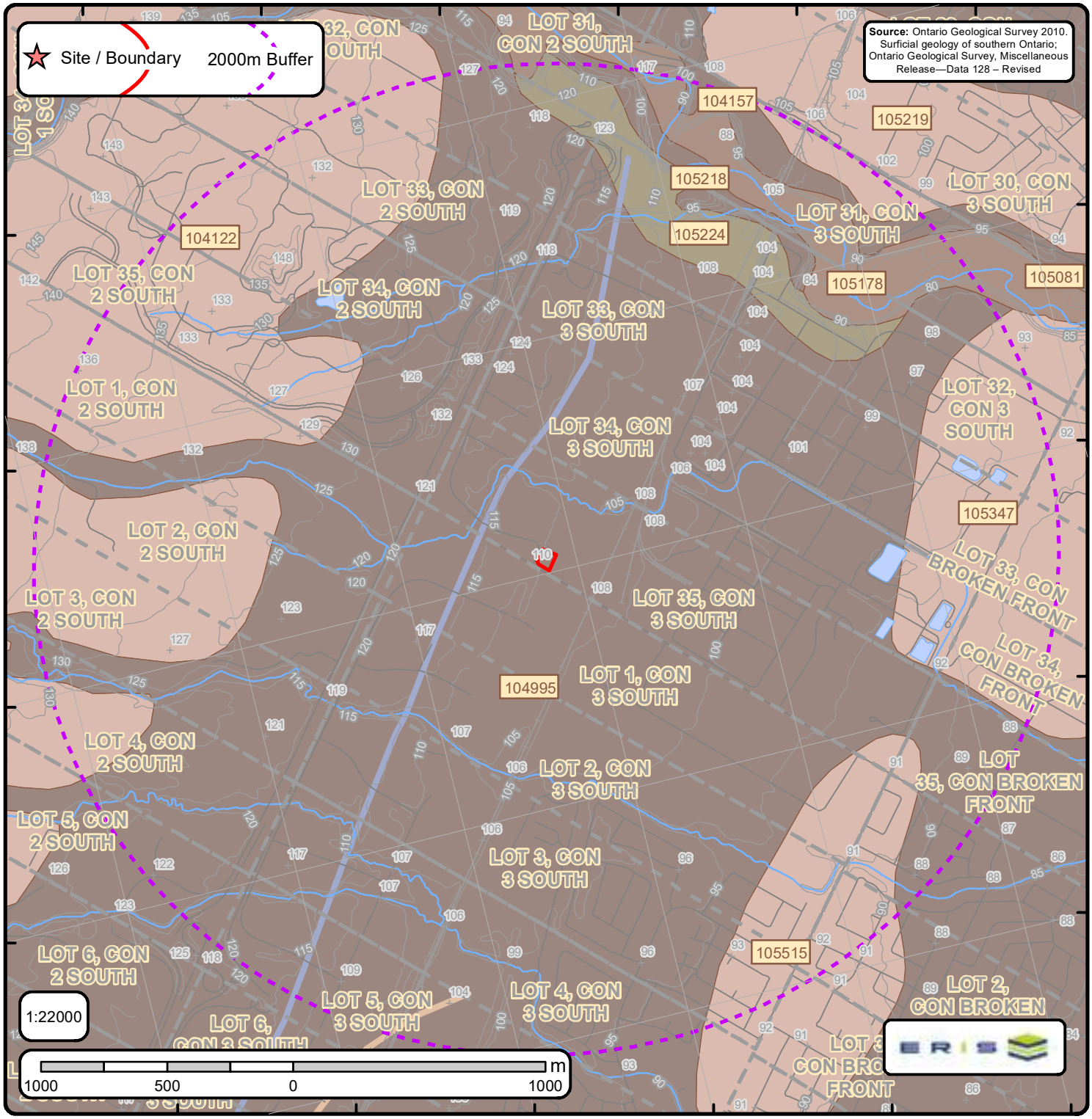
Soil ID: OND005031263
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGUX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031329
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOIDX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : Very severe limitations preclude annual cultivation; improvements feasible. | **First CLI Limitation Subclass** : Presence of surface stones > 15 cm diameter. | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 14 | **Total Sand(%)** : 35 | **Total Silt(%)** : 40 | **Total Clay(%)** : 25 | **Organic Carbon(%)** : 0.7 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.426 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-35 | **Horizon** : Bt | **Layer No** : 2 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 37 | **Total Silt(%)** : 34 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.324 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 35-100 | **Horizon** : Ck | **Layer No** : 3 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 24 | **Total Silt(%)** : 46 | **Total Clay(%)** : 30 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.171 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032585
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031348
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOIDX~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : Very severe limitations preclude annual cultivation; improvements feasible. | **First CLI Limitation Subclass** : Presence of surface stones > 15 cm diameter. | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 14 | **Total Sand(%)** : 35 | **Total Silt(%)** : 40 | **Total Clay(%)** : 25 | **Organic Carbon(%)** : 0.7 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.426 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-35 | **Horizon** : Bt | **Layer No** : 2 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 37 | **Total Silt(%)** : 34 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.324 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 35-100 | **Horizon** : Ck | **Layer No** : 3 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 24 | **Total Silt(%)** : 46 | **Total Clay(%)** : 30 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.171 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031265
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONFOT~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : moderately coarse sandy loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses | **Second CLI Limitation Subclass** : Presence of adverse Topography | **Depth(cm)** : 0-21 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 36 | **Total Silt(%)** : 47 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.86 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-27 | **Horizon** : Bmk | **Layer No** : 2 | **Very Fine Sand(%)** : 15 | **Total Sand(%)** : 73 | **Total Silt(%)** : 21 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 4.52 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-33 | **Horizon** : BCk | **Layer No** : 3 | **Very Fine Sand(%)** : 12 | **Total Sand(%)** : 78 | **Total Silt(%)** : 18 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 5.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-100 | **Horizon** : Ck | **Layer No** : 4 | **Very Fine Sand(%)** : 2 | **Total Sand(%)** : 91 | **Total Silt(%)** : 8 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.5 | **Saturated Hydraulic Conductivity(cm/h)** : 7.785 | **Electrical Conductivity(dS/m)** : 0 |



The Surficial Geology of Southern Ontario

Order No. 23102300496

Spot Height	Streams	Dune	Beach	Esker	karst	pitsg		
Waterbody	Contour Lines	Lake	Bluff	Esker ND	linfeat	popup		
Wetlands	Roads	Rib	Crevasse	Fluvial DL	megarip	ribl		
Airports	Railroads	Scab	Crest	fluvndl	mfluvdl	slidel		
Pit or Quarry	Morains	Slide	End	iceberg	mfluvndl	slumpb		
Lots		NOF Dune	Escarpment	icslope	moraine	terrace		

Surface Geology Report

Surface Geology units found within 2000 m of
845 Burloak Dr

Order No.
23102300496

ID: 104122 | **Unit Name:** Halton Till |
Deposit Type Code: 10 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** silty clay to clayey silt | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** Port Huron | **Stratus Modifier:** Surface | **Provenance:** Erie-Ontario | **Carbon Content:** medium | **Formation:** Halton Till | **Permeability:** Low | **Material Description:** Clay or silt till

ID: 104157 | **Unit Name:** Bedrock |
Deposit Type Code: 1 | **Deposit Age:** Ordovician and Silurian | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Shale and dolomite

ID: 104995 | **Unit Name:** Bedrock |
Deposit Type Code: 1 | **Deposit Age:** Ordovician and Silurian | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Shale and dolomite

ID: 105178 | **Unit Name:** Stream deposits |
Deposit Type Code: 16 | **Deposit Age:** Recent | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt, sand, gravel | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** fluvial | **Primary General Modifier:** modern floodplain | **Veneer:** | **Episode:** Hudson | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Gravel, sand, silt and clay

ID: 105218 | **Unit Name:** Bedrock |
Deposit Type Code: 1 | **Deposit Age:** Ordovician and Silurian | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Shale and dolomite

ID: 105219 | **Unit Name:** Halton Till |
Deposit Type Code: 10 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** silty clay to clayey silt | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** Port Huron | **Stratus Modifier:** Surface | **Provenance:** Erie-Ontario | **Carbon Content:** medium | **Formation:** Halton Till | **Permeability:** Low | **Material Description:** Clay or silt till

ID: 105224 | **Unit Name:** Lacustrine and outwash sand |
Deposit Type Code: 12 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** sand | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** glaciolacustrine | **Primary General Modifier:** foreshore/basinal | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** High | **Material Description:** Sand

ID: 105347 | **Unit Name:** Halton Till |
Deposit Type Code: 10 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** silty clay to clayey silt | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** Port Huron | **Stratus Modifier:** Surface | **Provenance:** Erie-Ontario | **Carbon Content:** medium | **Formation:** Halton Till | **Permeability:** Low | **Material Description:** Clay or silt till

ID: 105515 | **Unit Name:** Halton Till |
Deposit Type Code: 10 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** silty clay to clayey silt | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** Port Huron | **Stratus Modifier:** Surface | **Provenance:** Erie-Ontario | **Carbon Content:** medium | **Formation:** Halton Till | **Permeability:** Low | **Material Description:** Clay or silt till

Surface Geology Report Metadata

Ontario Geological Survey 2010. Surficial geology of southern Ontario; Ontario Geological Survey, Miscellaneous Release - Data 128 - Revised.

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY

ID - ID applied to the Unit

Unit Name - Name of deposit

Deposit Type Code - The geological unit number taken from the original map legend.

Deposit Age - to show the age when the sediments were deposited, e.g., Wisconsinan, postglacial or recent.

Map Number - Original map series number, eg., 'M2402' or 'P1973'. Each sgu_point feature is tagged to its original map.

Map Name - Usually NTS area where mapping was completed, e.g., 'Golden Lake'

Source Map Scale - The scale at which the original map was captured, e.g., '1:50 000'

Primary Material - This attribute provides the user with information regarding the most prevalent material present within a given area.

Primary Material Modifier- This attribute provides the user with a more refined description of the lithological classification of the primary material.

Secondary Material - This attribute provides the user with information regarding subordinate materials present within a given area.

Primary General - This attribute provides the user with an interpretation of the depositional environment within which the primary material was deposited.

Primary General Modifier - This attribute provides the user with a refined interpretation of the primary genetic modifier.

Veneer - This attribute provides the user with information regarding the type of material that forms a thin, discontinuous veneer over the primary material.

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Phase - A diachronic stratigraphic unit in a lower order than Subepisode, and the proposed sequence-stratigraphic classification is listed in the following table in the eastern and northern Great Lakes area (Karrow et al. 2000)

Stratus Modifier - This attribute provides the user information regarding the stratigraphic position of the mapped unit (i.e., whether the unit occurs primarily on the surface or in the subsurface).

Provenance - This attribute provides the user with information regarding the provenance of a particular till unit (i.e. direction or lobe from which the till is derived).

Carbon Content - This attribute provides the user with information regarding the carbonate content of till.

Formation - This attribute provides the user with information regarding the formation to which a given primary material belongs (e.g., Tavistock Till, Port Stanley Till, Scarborough Formation). This attribute is seamless and allows the user to create a map based on formation.

Permeability - This attribute provides the user with basic information about permeability of the sediments in a ranking of high, medium and low.

Material Description - Material or sediment description, e.g., 'sand and silty fine sand', 'silty sand and gravel' and 'silty till with low stone content'.

Appendix III Government and Regulatory Information

Ontario

Ministry of the Environment, Conservation and Parks

Corporate Management Division

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Division de la gestion ministérielle

January 9, 2024

Justin Serroul
Terrapex Environmental Ltd.

Dear Justin Serroul
RE: Request #: EPI-2024-2000003573
Requestor provided Client Reference: CT3959.01
Site address: 845 Burloak Drive, Oakville

This letter confirms that, after conducting a thorough search of its source system applications, the ministry has identified potential records related to your property request. Our search indicates that the ministry may hold the following records:

- Waste Generator number/classes
- Correspondence, Abatement, Occurrence reports
- Sewage Approval[1]
- Industrial Approval[1]

If you would like to submit a Freedom of Information (FOI) request to the ministry, please return to the table on the Requests tab of the EPI application and select “Submit FOI” under the Actions column in the row identified by EPI-2024-2000003573.

If you have any questions regarding the matter, please contact the ministry at eproperty@ontario.ca.

Sincerely,

Environmental Property Information (EPI) Program

Disclaimer

This search result is provided for informational purposes only and is not intended to provide specific advice or recommendations. The Ministry of the Environment, Conservation and Parks (MECP) cannot and does not guarantee that the information provided is current, accurate, complete, or free of errors. Any reliance upon this information is solely at the risk of the user.

[1] In addition to the core reports (e.g Environmental Compliance Approval), there may be extensive supporting documentation associated with this record type. When transferring your request over to FOI, we encourage you to refine the scope of your request to only the supporting documentation required for your purposes, as the inclusion of this additional documentation can add significant processing time.

Ontario

Ministry of the Environment, Conservation and Parks

Corporate Management Division

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Division de la gestion ministérielle

Le 9 janvier 2024

Justin Serroul
Terrapex Environmental Ltd.

Madame,
Monsieur, Justin Serroul
Objet : No de demande : EPI-2024-2000003573
Le demandeur a fourni une référence client: CT3959.01
Adresse du site: 845 Burloak Drive, Oakville

La présente lettre confirme que, après avoir effectué une recherche exhaustive dans ses applications de système source, le ministère a circonscrit des dossiers potentiels reliés à votre demande concernant des biens immobiliers. Notre recherche indique que les dossiers suivants peuvent être en possession du ministère:

- Waste Generator number/classes
- Correspondence, Abatement, Occurrence reports
- Sewage Approval[1]
- Industrial Approval[1]

Si vous souhaitez soumettre une demande de liberté d'information (FOI) au ministère, veuillez retourner au tableau de l'onglet Requêtes de l'application EPI et sélectionner "Soumettre FOI" dans la colonne Actions de la ligne identifiée par EPI-2024-2000003573.

Si vous avez des questions concernant votre demande, nous vous invitons à communiquer avec le ministère à l'adresse électronique suivante : eproperty@ontario.ca.

Veuillez recevoir mes salutations les plus sincères,

Programme d'Information Environnementale de la propriété

Avertissement

Ce résultat de recherche est fourni uniquement à titre informatif et n’a aucunement pour but de donner des conseils particuliers ou des recommandations. Le ministère de l’Environnement de la Protection de la nature et des Parcs (MEPP) ne peut pas garantir que les renseignements fournis sont à jour, exacts, complets et exempts d’erreurs. L’utilisateur qui se fie à ces renseignements le fait à ses seuls risques.

[1] En plus des rapports de base (par exemple, l'approbation de conformité environnementale), il peut y avoir de nombreux documents justificatifs associés à ce type d'enregistrement. Lors du transfert de votre demande vers FOI, nous vous encourageons à affiner la portée de votre demande en ne tenant compte que des pièces justificatives requises pour vos besoins, car l'inclusion de ces documents supplémentaires peut ajouter un temps de traitement important.

RE: Request for information-845 Burloak Dr. , Oakville and surrounding

PI Public Information Services <publicinformationservices@tssa.org>
To Wahida Nashreen

RECORD FOUND IN CURRENT DATABASE

Hello,

Thank you for your request for confirmation of public information. TSSA has performed a preliminary search of TSSA's current database.

- We confirm that there are records in our current database of any fuel storage tanks at the subject address(es).

Inventory Number	Address	City	Province	Postal Code	Status	Asset Type / Inventory Item
13414273	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS GASOLINE STATION - SELF SERVE
13472689	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS LIQUID FUEL TANK
13472690	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS LIQUID FUEL TANK
13472691	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS LIQUID FUEL TANK
30637482	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS CYLINDER EXCHANGE
64470870	5539 HARVESTER RD	BURLINGTON	ON	L7L 5N5	Active	FS LIQUID FUEL TANK

Accessing the applications

1. Click Release of Public Information - TSSA and click "need a copy of a document"
2. Select the appropriate application, download it, complete it in full and save it (Note: you will have to upload the application)
3. Proceed to page 3 of the application and click the "TSSA Service Prepayment Portal" link under payment options (the link will take you the secure site where you can pay for the request via credit card)

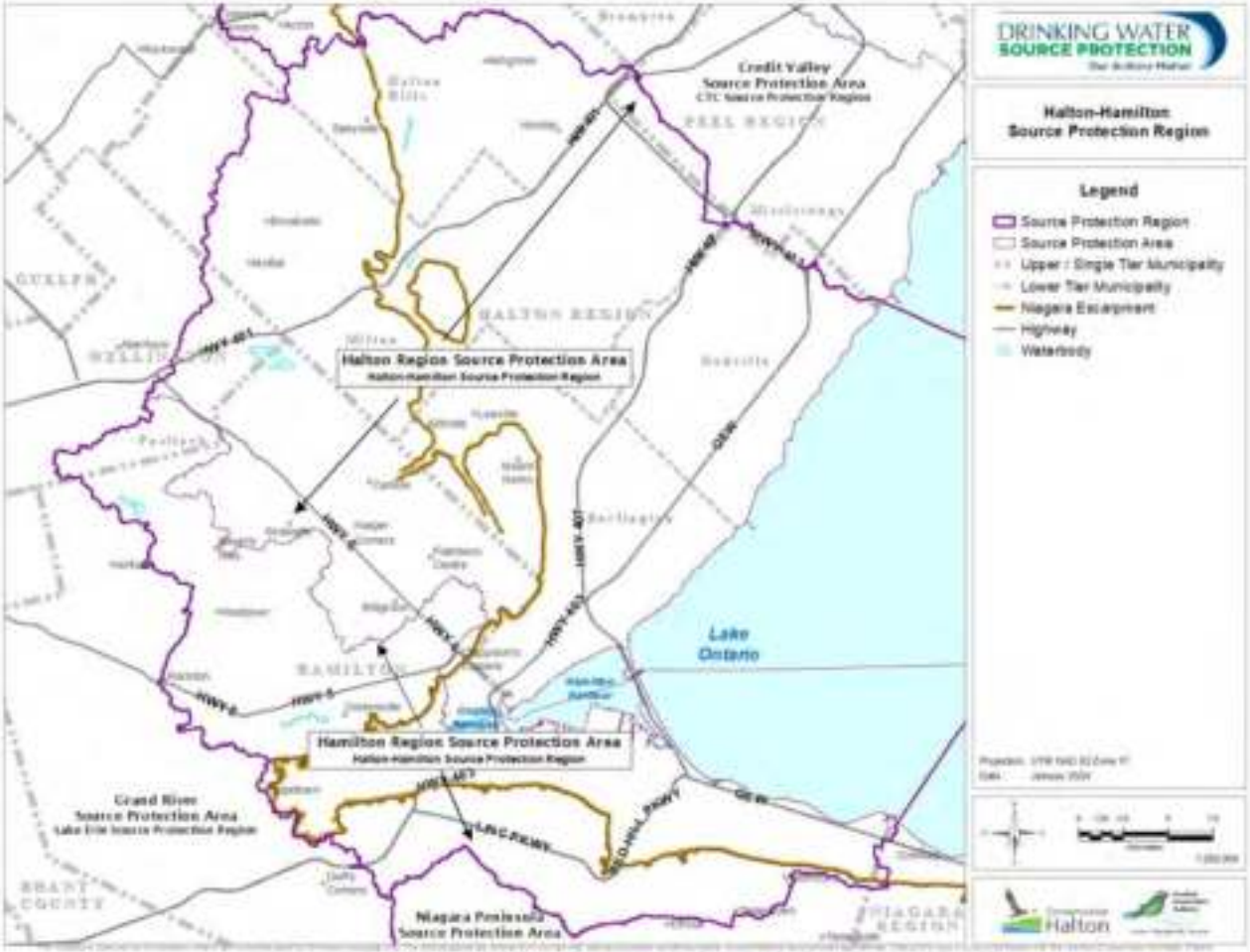
Wellhead and Intake Protection Zone

Legend

- Issue Contributing Areas
- WHPA-E
- Wellhead Protection Area
  - A
  - B
  - C
  - C1
  - D
  - F
- Intake Protection Zone 1
- Event Based Areas
- Intake Protection Zone 2
- Source Protection Areas

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Environment, Conservation and Parks (MECP) shall not be liable in any way for the use or any information on this map. of, or reliance upon, this map.

Map Created: 1/10/2024
Map Center: 43.39257 N, -79.75122 W


DRINKING WATER
SOURCE PROTECTION
Halton-Hamilton
Source Protection Region
Legend
Source Protection Region
Source Protection Area
Upper / Single Tier Municipality
Lower Tier Municipality
Niagara Escarpment
Highway
Waterbody
Credit Valley
Source Protection Area
PEEL REGION
HALTON REGION
Halton Region Source Protection Area
Halton-Hamilton Source Protection Region
HAMILTON
Hamilton Region Source Protection Area
Halton-Hamilton Source Protection Region
Lake
Ontario
Grand River
Source Protection Area
Lake Erie Source Protection Region
BRANT
COUNTY
Niagara Peninsula
Source Protection Area
NIAGARA
REGION
HWY 401
HWY 6
QEW
LINC PKWY
RED HILL PKWY
Conservation
Halton

Ontario

Ministry of Natural Resources and Forestry

Make-a-Map: Natural Heritage Areas

Natural Heritage Areas

Map created:1/10/2024

Notes:

Enter map notes

Legend

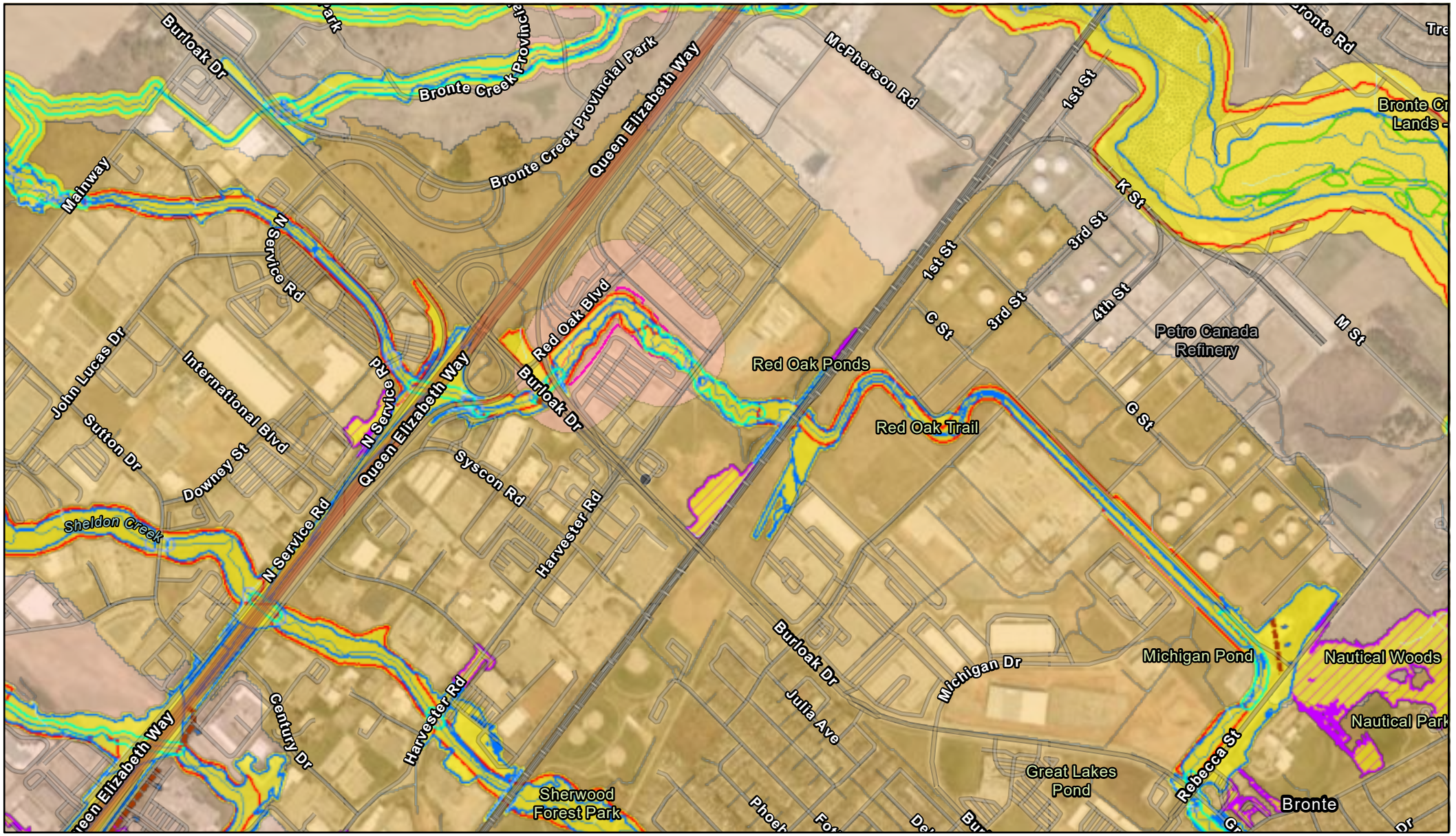
- Assessment Parcel
- Greenbelt Area Boundary
- Greenbelt Hamlets
- ORM Boundary
- NEP Boundary
- Greenbelt External Connections
- NEP Parks and Open Space System
- NEP Minor Urban Centres
- ANSI
- Earth Science Provincially Significant/sciences de la terre d'importance provinciale
- Earth Science Regionally Significant/sciences de la terre d'importance régionale
- Life Science Provincially Significant/sciences de la vie d'importance provinciale
- Life Science Regionally Significant/sciences de la vie d'importance régionale
- Evaluated Wetland
- Provincially Significant/considérée d'importance provinciale
- Non-Provincially Significant/non considérée d'importance provinciale
- Unevaluated Wetland
- Woodland
- Conservation Reserve
- Provincial Park
- Greenbelt Towns and Villages
- Natural Heritage System

0.3 0 0.17 0.3 Kilometres

Absence of a feature in the map does not mean they do not exist in this area.

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry(OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

Conservation Halton Regulation Mapping



1/29/2024, 11:08:04 AM

1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

- Approximate Regulation Limit
- Shoreline 100 year Flood Elevation Hazard
- Shoreline Dynamic Beach Hazard
- Shoreline Hazard
- Stable Top of Bank (STOB) Hazard
- Wetland Hazard
- Spill Zone Hazards
- Floodplain Hazard
- Headwater Floodplain Hazard
- Meander Belt Hazard
- Consult Conservation Halton
- Spill Arrows
- Spill Lines

Waterflow

- Non-Regulated
- Regulated
- Draft Regulated Adjacent Lands
- Draft Wetland Layer

ANSI TYPE

- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life Science
- ESAs (Hamilton, Halton)

NEC Planning Areas

- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- Urban Area

Watersheds

- Appleby Creek
- Beach Strip Area
- Bronte Creek
- Falcon Creek
- Fourteen Mile Creek
- Grindstone Creek
- Indian Creek
- Joshua's Creek
- Lower Hager Creek
- Lower Morrison Creek
- Lower Rambo Creek
- Lower Wedgewood Creek
- McCraney Creek
- North Cootes Paradise
- Roseland Creek
- Sheldon Creek
- Shoreacres Creek
- Sixteen Mile Creek
- Tuck Creek
- Upper Hager Creek
- Upper Rambo Creek
- West Aldershot
- Regulated Area of Cootes Paradise Waterbody
- Regulated Area of Lake Ontario Waterbody
- Conservation Halton

Conservation Halton, 2023

Conservation Halton, 2023

Appendix IV Aerial Photographs and Satellite Images

LEGEND

- SITE BOUNDARY
- STUDY AREA

0 50 100 150
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
1954 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

C:\Users\JSerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase ONE ESA\CT3959.00 FIG V HISTORICAL AERIALS.mxd

LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

1965 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

1979 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

1995 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

2002 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

2008 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

2019 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	DECEMBER 2023	**V-X**

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LEGEND

SITE BOUNDARY

STUDY AREA

0 50 100 150

Metres

DATA SOURCE: ESRI
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SUNCOR ENERGY

SITE LOCATION:

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:

2022 HISTORICAL AERIAL PHOTOGRAPH

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.00	XX
REVISION:	DATE:	FIGURE:
00	FEBRUARY 2024	**V-X**

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Appendix V Client Files

Site: 35207

CORRESPONDENCE

DRAWINGS / PHOTOGRAPHS

OTHER (PERMITS, ETC)

PM Workbook

REPORTS

SAFETY

NON OPERATING FILES

Jacques Whitford Environment Limited

Consulting Engineers
Environmental Scientists
Risk Consultants

ISO 9001

1200 Denison Street, Markham, Ontario, Canada L3R 8G6
Tel 416 495 8614 Fax 905 479 9326

World Wide Web www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com

Ontario • Quebec • New Brunswick • Nova Scotia • Prince Edward Island • Newfoundland & Labrador • Saskatchewan • Alberta • British Columbia • Northwest Territories
Maine • New Hampshire • Vermont • New York • Trinidad • Russia • Argentina

May 15, 2003 Project No. ONT10802

Petro-Canada
Central Region Business Centre
3275 Rebecca Street
Oakville, Ontario
L6L 6N5

Attention: Mr. Ed Harvey, P.Eng.

Re: Historical Review and Site Visit
Undeveloped Lot - Southeast corner of Burloak Drive and South Service Road
Oakville, Ontario

Dear Mr. Harvey:

Jacques Whitford Environment Limited (JWEL) was retained by Petro-Canada to complete an Historical Review and Site Visit of a parcel of undeveloped land located on the southeast corner of Burloak Drive and South Service Road in Oakville, Ontario, herein referred to as the "Site". JWEL understands that Petro-Canada proposes to develop the Site with a retail fuel outlet.

A site location and regional road map is included as Drawing No. 1, and a site plan is included as Drawing No. 2, both located in **Appendix 1** of this report. Insurers' Advisory Organization information is included in **Appendix 2**.

The purpose of the assessment was to identify potential environmental concerns associated with the Site. This report is based on a site visit, a review of selected available aerial photographs, topographic maps, a city directory search, regulatory database sources and Insurers' Advisory Organization information. No previous environmental investigation reports were made available to JWEL.

GENERAL SITE INFORMATION

The Site is legally described as Part of Lot 35, Concession 3, South of Dundas Street, (Trafalgar), Town of Oakville, Regional Municipality of Halton, and encompasses an area of approximately 0.66 hectares (1.62 acres). The Site is currently zoned as C3A (Automotive fuel station with or without service facilities) and appears to be used as a crop field for agricultural purposes. A drainage ditch is located adjacent to the west property line, along Burloak Drive. Surface drainage appears to be

south and west to the drainage ditch running along the western property line (along the east side of Burloak Drive).

A review of a 1999 topographic map (based on 1996 aerial photographs) indicates that the Site and surrounding area is relatively flat. Regional drainage (anticipated groundwater flow direction) appears to be east/southeast towards a tributary of Sheldon Creek, located approximately 300 m from the Site.

GEOLOGY REVIEW

Based on a review of the available geological information from the Ontario Ministry of Northern Development and Mines, the following surficial and subsurface geology would be expected at the Site:

- *Quaternary Geology of Ontario - Southern Sheet, Map 2556* - the native surficial soils at the property likely consist of undifferentiated carbonate and clastic sedimentary rock, exposed at the surface or covered by a discontinuous, thin layer of drift; and

- *Bedrock Geology of Ontario - Southern Sheet, Map 2544* - the bedrock in the area of the property would likely be consist of Upper Ordovician, comprised of shale, limestone, dolostone and siltstone.

SITE HISTORY REVIEW

The historical records review conducted for the Site and adjacent properties included a review of available aerial photographs (1960, 1965, 1966, 1979, 1986, and 1988), and city directories (1960, 1965, 1971, 1973, 1975, 1981, 1986, 1991, 1996, and 2001). Insurers' Advisory Organization (IAO) information was not available for the Site. A summary of historic on-site land uses is provided in the table below.

Historical Information for Site	
Period/Date	**Land Use**
Prior to 1960 to the present	Undeveloped/Agricultural - Site utilized as a crop field.

As indicated, the Site has been undeveloped and utilized as a crop field from as early as the 1960s. No historic site activities that would be considered potential sources of environmental contamination were identified through the review of available historical information.

A chain-of-title was also conducted for the Site to supplement the records review. The following is a summary of the historic title.

Period	Registered Owner
2001 – present	1427814 Ontario Limited
1998 – 2001	Reliant Development Corporation
1984 – 1998	Petro Canada Products Inc.
1965 - 1984	William J.E.Beverly
1952 – 1965	Normal L. Small, Jessie C. Small
1936 1952	Epriham D. Steen
1932 1936	James F. Wilson, Margaret M. Wilson
1924 - 1932	William F. Jackson
1923 – 1924	The Boake Manufacturing Co. Ltd.
1918 - 1923	Joseph Haberman
1893 – 1918	Lennard E. Wrinch

1884 – 1887	Leonard E. Wrinch
1882 – 1884	John Lucas
1859 – 1882	Robert L. Lucas
1856 – 1859	John Lucas
1817 – 1856	Steven Lucas
1809 – 1817	William Sand

No ownership entities that would be considered an environmental concern to the Site were identified through the historical title search.

The following is a summary of the historical land uses on the adjoining properties.

Historical Information for Adjoining Properties	
Boundary Side of Site	**Comments**
North (across South Service Road)	From before 1960 to the present – Undeveloped/agricultural. South Service Road constructed in the early 1980s.
South	From before 1960 to the present – Undeveloped/agricultural.
East	From before 1960 to the present – Undeveloped/agricultural.
West (across Burloak Drive)	From before 1960 to the late 1980s – Undeveloped/agricultural. Late 1980s to the present – Commercial/Industrial (multi-tenant office/warehouse building)
Northwest (across intersection of Burloak Drive and Harvester Road)	From before 1960 to early 2003 – Undeveloped/agricultural Early 2003 to the present – Commercial (Gasoline service station)

An Esso gasoline service station with four associated USTs is located approximately 40 m northwest of the Site across the intersection of Burloak Drive and South Service Road. According to discussions with Mr. Jerry Black, station manager, this gasoline service station was constructed in late 2002 and opened in January 2003. Based on the duration of time that this gasoline service station has operated (less than one year), the presence of this gasoline service station is not considered to be an environmental concern to the Site at this time.

ENVIRONMENTAL DATABASE REVIEW

Ontario Ministry of Environment: A request to the Ontario Ministry of Environment (MOE) was made through the Freedom of Information and Privacy Protection Office for any available information on the Site. At the time of issuance of this letter, a reply from the MOE had not been received regarding records of reportable spills, charges, and/or convictions occurring at or near the Site.

Waste Generator Registration Database: Information contained in the 2001 MOE Regulation 347 Public Information Dataset indicates that no past/present owners/tenants of the Site are registered with the MOE as generators of registerable waste for this property.

Inventory of PCB Storage Sites: Information contained in the Ontario Inventory of PCB Storage Sites (2000), indicates that the Site and adjoining properties are not listed as PCB storage facilities.

Waste Disposal Site Inventory: Information contained in the Ontario Ministry of the Environment Waste Disposal Sites Inventory (1987), indicates an active landfill site located approximately 900 m east of the Site. Based on the separation distance of this active landfill site from the Site, and the anticipated direction of groundwater flow in the vicinity of the Site (south/southeast), the presence of this active landfill site does not represent an environmental concern to the Site. The Site and adjoining properties and not within 1 km of any other landfill sites (active or former).

Coal Gasification Plant Waste Sites Inventory: Information contained in the Ontario Ministry of the Environment Coal Gasification Plant Waste Sites Inventory (1987), indicates the Site and adjoining properties and not within 1 km of a coal gasification plant waste site.

SUMMARY

Based on information gathered and observations made, the historical review and site visit has revealed no evidence of environmental contamination in connection with the Site. No recommendation for further environmental investigations of the Site are deemed necessary based on the findings of this historical review and site visit.

CLOSURE

The information presented is based on a review of limited sources of existing information regarding the Site. Due to the preliminary nature of the review and the limited data available, the assessor cannot warrant against undiscovered environmental liabilities.

This report has been prepared for the sole benefit of Petro-Canada. The report may not be relied upon by any other person or entity without the express written consent of Jacques Whitford Environment Limited (JWEL) and Petro-Canada. For inquiries from parties other than JWEL and Petro-Canada regarding content or use of this report, contact JWEL or Petro Canada directly. Any use which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. JWEL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, JWEL in certain instances has been required to assume that the information provided is accurate.

The conclusions presented represent the best judgement of the assessor based on current environmental standards.

Should additional information become available, JWEL requests that this information be brought to our attention so that we may re-assess the conclusions presented herein. This report was prepared by Ms. Sharon Waters, B.A., and reviewed by Mr. David Uren, P.Eng.

Yours very truly,

JACQUES WHITFORD ENVIRONMENT LIMITED

Sharon Waters, B.A., C.P.T.
Environmental Site Assessor

David J. Uren, P.Eng.
Senior Technical Reviewer

Distribution: (1) Addressee

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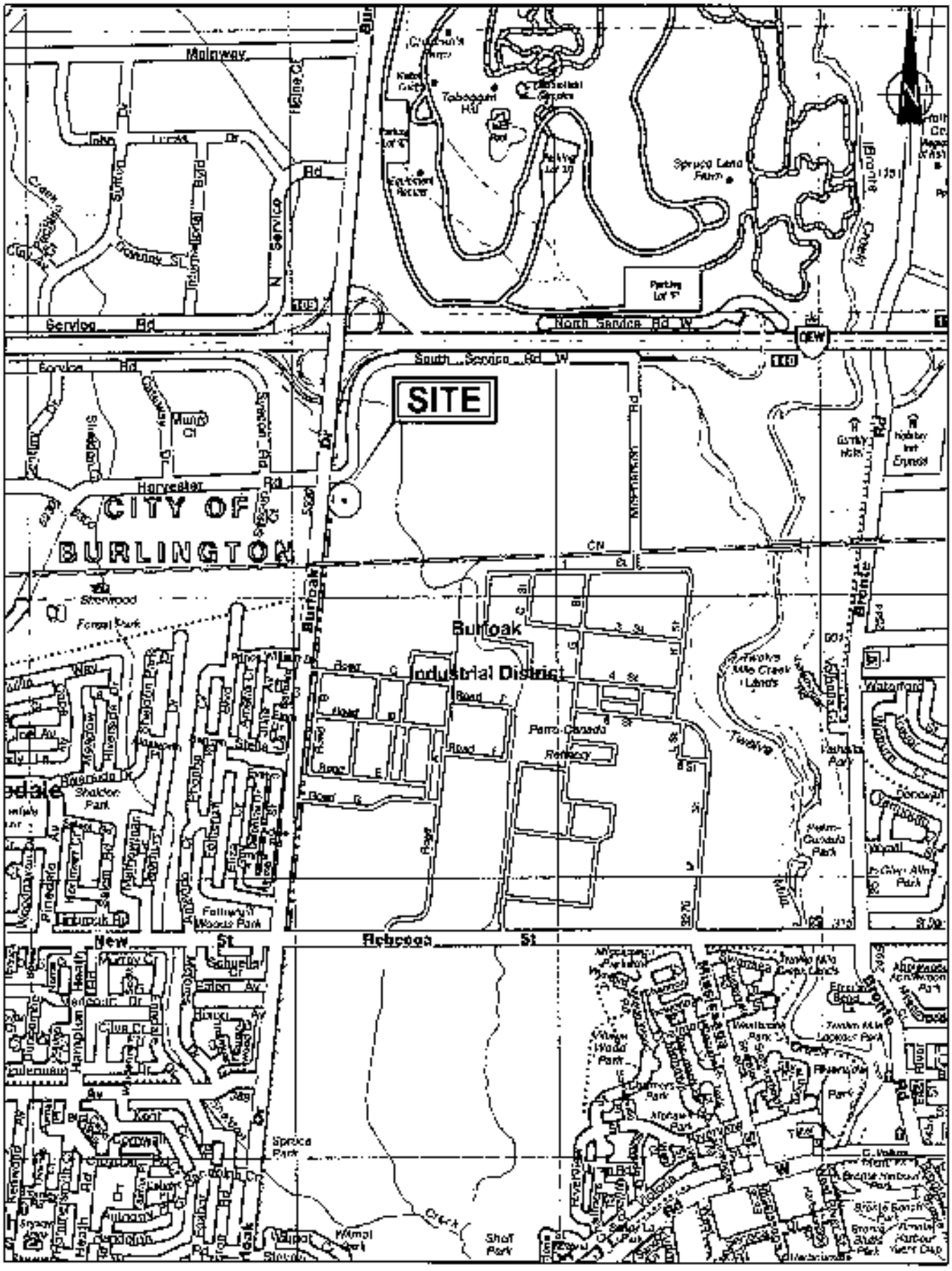
APPENDIX 1

SITE PLANS

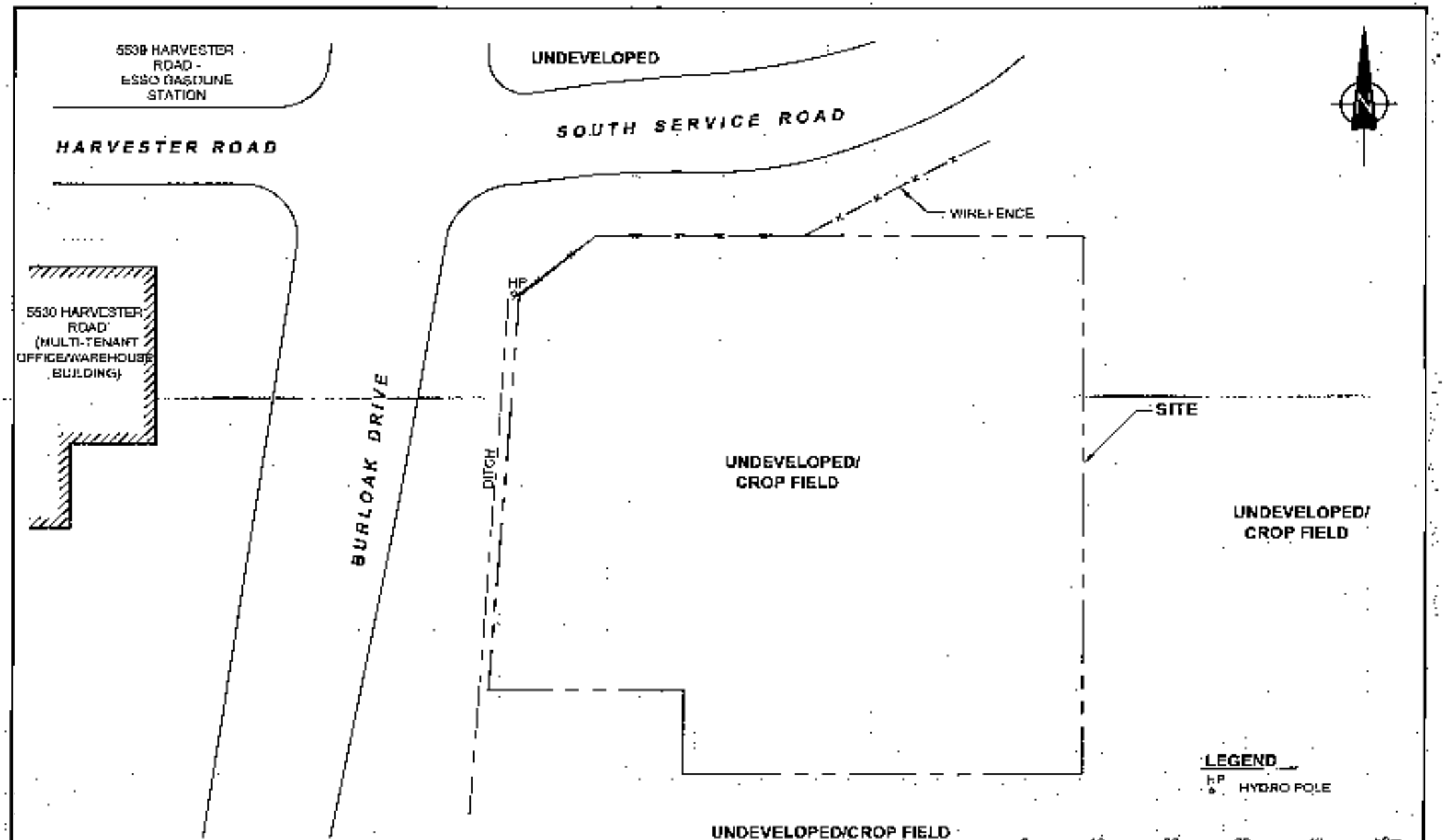


SITE LOCATION AND REGIONAL ROAD MAP

Job No.:	Dwg No.:
ONT10802	1

Date:	Dwn. by:	Appd.:
03/04/30	AA	SW

Jacques Whitford



NOTE: LOCATIONS OF OFFSITE FEATURES ARE APPROXIMATE AND MAY VARY FROM THAT SHOWN.

SITE PLAN
SOUTHEAST CORNER OF BURLOAK DRIVE AND SOUTH SERVICE ROAD,
OAKVILLE, ONTARIO

Job No.:	Dwg. No.:	
ONT10862	2	
Date: 03/05/02	Dwn. by: AA	Appd: SW

Jacques Whitford

APPENDIX 2

INSURERS' ADVISORY ORGANIZATION INFORMATION

MAY 0 9 2003

Insurers' Advisory Organization Inc.

RECEIVED
MAY 08 2003

Ontario Division

90 Allstate Parkway
Markham, Ontario
L3R 6H3

Telephone: (905) 474-0003
Toll Free: 1-800-268-8080
Fax: (905) 474-5604
Website: www.iao.ca

IAO Environmental Services

Attention: Adele Kanabe
JACQUES WHITFORD
1200 Denison Ave.
MARKHAM, ON
CANADA L3R 8G6

Historical Environmental Information Reporting System (HEIRS™)

Date: May 6, 2003

Subject Property: South East Corner of Burloak Dr. & South Service Rd., Oakville

---

As requested, we have searched our records concerning the above site and no IAO records have been found.

Our invoice of $ 25.00 (+ GST) for the information provided will follow. Please remit your payment to the order of CGI Information Systems and Management Consultants Inc. as per attached notice.

Thank you for employing the services of the IAO.

Yours sincerely,

Alfio Granzotto
Environmental Services

Site: 35207

CORRESPONDENCE

DRAWINGS / PHOTOGRAPHS

OTHER (PERMITS, ETC)

PM Workbook

REPORTS

SAFETY

NON OPERATING FILES

Jacques Whitford Environment Limited

Consulting Engineers
Environmental Scientists
Risk Consultants

ISO 9001

1200 Denison Street, Markham, Ontario, Canada L3R 8G6
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World Wide Web: www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com

Ontario • Quebec • New Brunswick • Nova Scotia • Prince Edward Island • Newfoundland & Labrador • Saskatchewan • Alberta • British Columbia • Northwest Territories
Maine • New Hampshire • Vermont • New York • Trinidad • Russia • Argentina

JACQUES WHITFORD ENVIRONMENT LIMITED
ENVIRONMENTAL SUBSURFACE INVESTIGATION REPORT

CLIENT: Petro-Canada		**ATTENTION:** Mr. Ed Harvey, P.Eng.
OUTLET No.: 35207 (Green Site)	**JWEL NO.:** ONT10802.001	**REPORT DATE:** 04/02/04
PROJECT: Environmental Subsurface Investigation (Based on the *Request for Services* dated 03/10/30)		**INVESTIGATION DATES:** 03/12/22 to 03/12/23 **MONITORING AND GROUNDWATER SAMPLING DATE:** 03/12/30

LOCATION: The Site is located at 845 Burloak Drive (at South Service Road) in the Town of Oakville, Ontario.

(Note: Drilling services were provided by Eastern Soil Investigation Limited of Courtice, Ontario and laboratory services were provided by PSC Analytical Services Inc. of Mississauga, Ontario.)

SITE FEATURES AND BACKGROUND (See Drawing Nos. 1 and 2)

Neighbouring Land Uses
North: Agricultural (across South Service Road)
East: Agricultural
South: Agricultural
West: Commercial / Industrial (across Burloak Drive).

Site Ground Cover
The ground surface at the subject site was tilled agricultural land and sloped gradually from north to south.

Regional Surficial Drainage
Regional surficial drainage appears to be to east / southeast towards a tributary of Sheldon Creek, located approximately 300 m from the Site.

Regional Surficial Soils
According to the available geological information published by the Ministry of Northern Development and Mines (*Map 2556, Quaternary Geology of Ontario – Southern Sheet*), the regional surficial soils in the area of the subject site have been classified as of Halton Till (Ontario – Erie Lobe) which are primarily comprised of silt to silty clay.

Groundwater Usage
A Ministry of the Environment (MOE) Water Well Search was completed for the area surrounding the subject site. Based on the results of this search, a total of eleven (11) wells are registered within 1 km of the subject site. Three wells were installed in the 1980's, however all three are cross- or up-gradient of the anticipated groundwater flow direction. Based on information obtained from the Region of Halton Public Works Department, potable water for the Town of Oakville and the City of Burlington is supplied via a municipal distribution system that obtains its water from Lake Ontario. Therefore, it is not considered likely that groundwater in the vicinity of the subject site is used as a source of potable water.

GENERIC CRITERIA SELECTION (See Appendix A)

A generic criteria selection (GCS) was conducted for the intended land use of the subject property by Jacques Whitford in accordance with the MOE's *Guideline for Use at Contaminated Sites in Ontario*, dated February, 1997 as amended. However, based on the results of the grain size analysis and the GCS, the MOE Table B restoration criteria for an industrial/commercial land use with medium / fine grained soils in a non-potable groundwater condition were applied to the site.

SUBSURFACE INVESTIGATION RESULTS

Number of Boreholes: Eleven (BH1 to BH11)
Number of Monitoring Wells Installed: Three (One 50 mm diameter well in each of BH3, BH5 and BH9)

The approximate elevations of the monitoring wells and the respective ground surface in the vicinity of the boreholes and monitoring wells were determined relative to a Temporary Benchmark (TBM) with an assigned elevation of 100.00 m. The TBM was established as an approximate 300 mm diameter cover plate for the traffic control system located on the sidewalk in the southeast corner of the intersection of Burloak Drive and South Service Road (see Drawing No. 2).

SUBSURFACE INVESTIGATION RESULTS - continued

Stratigraphy (See Appendix B)	Subsurface Conditions (See Appendix B)
The encountered shallow soil profile generally consisted of a layer of topsoil underlain by silty clay with trace shale fragments to approximate depths ranging from approximately 1.5 m (BH8) to 2.6 m (various locations) below grade. Underlying the silty clay layer was shale bedrock to the full extent of the boreholes.	Vapour concentrations measured in the soil samples recovered during the drilling program were <5 ppm in all soil samples recovered.

Monitoring Results (See Table 1)

The monitoring wells installed in each of BH3, BH5 and BH9 were monitored on 03/12/30. The depth to the groundwater table ranged from 0.38 m (BH5 and BH9) to 2.52 m (BH3) below grade. Vapour concentrations measured on 03/12/30 in the monitoring wells ranged from <5 ppm (BH9) to 20 ppm (BH3 and BH5).

[illegible] RESULTS (cont'd)

No. of Soil Samples Submitted: 17	Soil Analyses: One soil sample (based on headspace vapour concentrations) was recovered from each borehole (BH1 to BH11) and submitted for BTEX and TPH (gas/diesel and heavy oils) analyses. In addition, one discrete soil sample from each of BH3, BH5, BH9, and BH11 was analyzed for selected metal parameters. Also two composite samples were collected and analyzed as follows: • Composite 1: comprised of soils sampled from the upper 0.6 m of BH1 to BH11 and analyzed for Triazine Herbicides, Organochlorine Pesticides and Polycyclic Aromatic Hydrocarbons (PAHs). • Composite 2 comprised of soils taken from drill cuttings from BH1 to BH11 and analyzed for selected Ontario Regulation 558 Waste Classification parameters including inorganics (with select metals), PCBs, ignitability, volatile organic compounds (VOCs) and semi-VOCs.
The soil analytical results and comparative criteria are summarized in Tables 2 to 7.	
MOE Table B Exceedances:	None; Concentrations of BTEX, TPH (gas/diesel and heavy oil ranges), selected metal parameters, PAHs, Organochlorine Pesticides, and Atrazine Herbicides, where tested, were below the MOE Table B criteria in all of the submitted soil samples.
Regulation 558 Waste Materials Classification:	Based on the results of the submitted soil sample, the tested soils would be classified as a non-hazardous material.
No. of Groundwater Samples: 6	Groundwater Analyses: One groundwater sample was submitted from BH3, BH5 and BH9 for analyses of BTEX and selected metal parameters.
The groundwater analytical results and comparative criteria are summarized in Tables 8 and 9.	
MOE Table B Exceedances:	None; Concentrations of BTEX and selected metal parameters were below the MOE Table B criteria in all of the submitted water samples.
Next monitoring date: None scheduled at this time.	

Note: Drilling, monitoring and soil sampling was conducted in accordance with Petro-Canada's "Environmental Site Assessment and Site Remediation Protocol" Version 1.0, dated November, 2002 and the MOE's "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", dated May, 1996.

CLOSURE

This report has been prepared for the sole benefit of Petro-Canada. The report may not be used by any other person or entity without the express written consent of Jacques Whitford Environment Limited (Jacques Whitford) and Petro-Canada.

Any use which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. Jacques Whitford accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The information presented as part of the historical land use audit is based on a preliminary review of limited sources of existing information regarding the site. Due to the preliminary nature of the review and the limited data available, the assessor cannot warrant against undiscovered geotechnical or environmental liabilities. The conclusions presented in this report should not be construed as legal advice.

The conclusions presented in this report represent the best technical judgement of Jacques Whitford based on the data obtained from the work. The conclusions are based on the site conditions encountered by Jacques Whitford at the time the work was performed at the specific testing and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations. The extent of the limited area depends on the soil and groundwater conditions, as well as the history of the site reflecting natural, construction and other activities. In addition, analysis has been carried out for a limited number of chemical parameters, and it should not be inferred that other chemical species are not present. Due to the nature of the investigation and the limited data available, Jacques Whitford cannot warrant against undiscovered environmental liabilities.

If conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

Respectfully submitted,

JACQUES WHITFORD ENVIRONMENT LIMITED

Terry Rasmussen, C.Chem.

John Cracknell, P.Eng.

Distribution: (3) • Addressee

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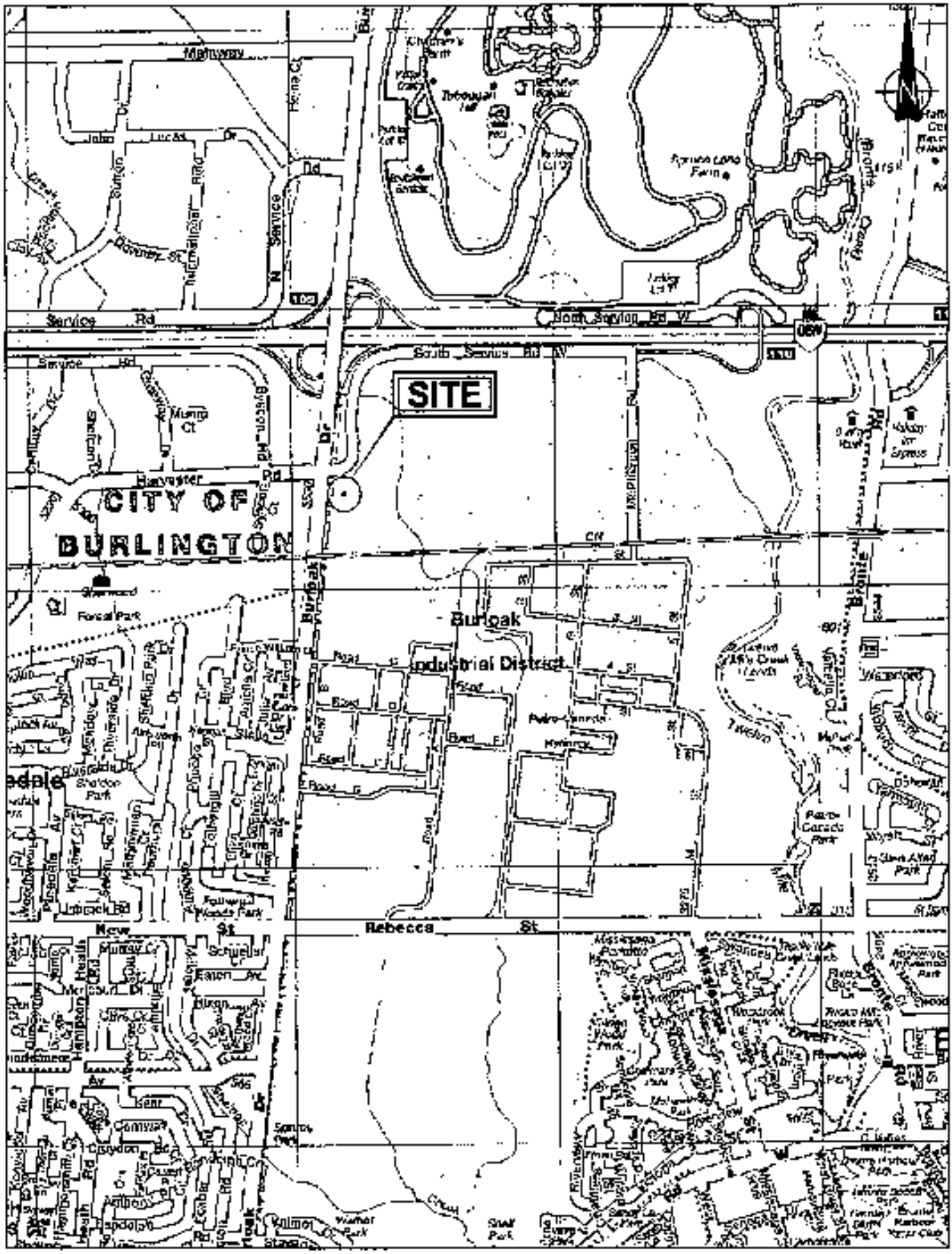
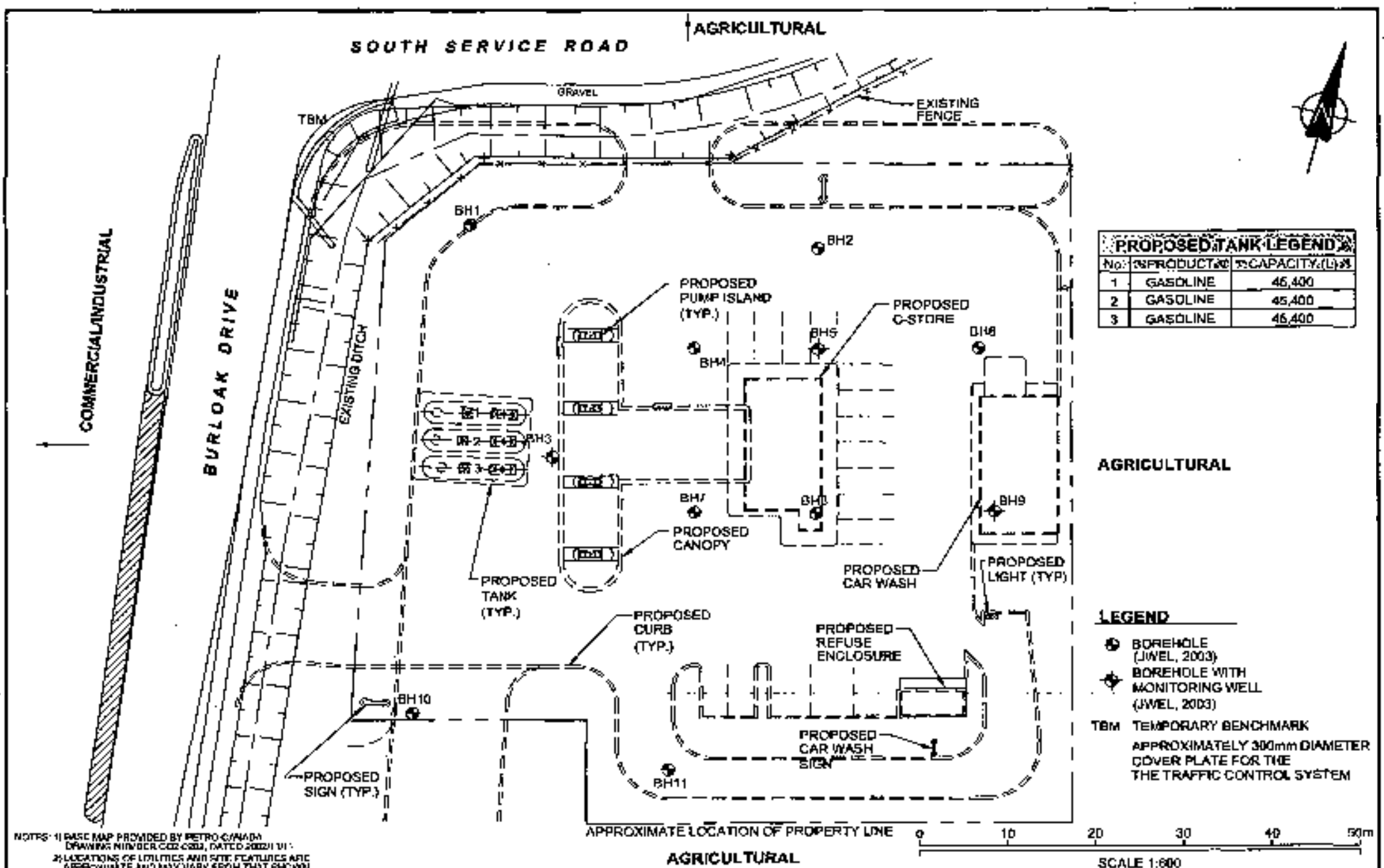


SITE LOCATION AND REGIONAL ROAD MAP

Job No.:	Dwg. No.:
ONT10602	1

Date:	Dwn. by:	Appd.:
03/04/30	AA	SW

Jacques Whitford



PROPOSED TANK LEGEND		
No.	PRODUCT	CAPACITY (L)
1	GASOLINE	46,400
2	GASOLINE	46,400
3	GASOLINE	46,400

LEGEND

- BOREHOLE (JWEL, 2003)
- BOREHOLE WITH MONITORING WELL (JWEL, 2003)
- TBM TEMPORARY BENCHMARK APPROXIMATELY 300mm DIAMETER COVER PLATE FOR THE THE TRAFFIC CONTROL SYSTEM

NOTES: 1) BASE MAP PROVIDED BY PETRO-CANADA DRAWING NUMBER C02-C003, DATED 2002/01/01
2) LOCATIONS OF UTILITIES AND SITE FEATURES ARE APPROXIMATE AND MAY VARY FROM THAT SHOWN.

SITE PLAN SHOWING EXISTING AND PROPOSED FEATURES AND EXISTING BOREHOLE AND MONITORING WELL LOCATIONS
645 BURLOAK DRIVE (AT SOUTH SERVICE ROAD), OAKVILLE, ONTARIO

Job No.:	Dwg. No.:	
ONT10802.001	2	Jacques Whitford
Date: 04/01/15	Dwn. by: AA	Appd: TR

TABLE 1
GROUNDWATER ELEVATIONS
AND SUBSURFACE VAPOUR CONCENTRATIONS
Monitoring Date: 03/12/30

Parameter	BH1	BH2	BH3
GROUNDWATER DEPTH BELOW GRADE (m)	2.52	0.38	0.38
GROUNDWATER ELEVATION[a] (m)	96.72	98.57	98.37
SUBSURFACE VAPOUR CONCENTRATION[b]	20 ppm	20 ppm	<5 ppm
APPARENT THICKNESS OF LIQUID PHASE HYDROCARBONS (mm)	0	0	0

Notes:

a Groundwater elevations based on an elevation of 100.00 m above mean sea level assigned to the temporary benchmark, an approximately 300 mm diameter cover plate for the traffic control system located in the sidewalk on the southeast corner of the intersection of Burloak Drive and South Service Road (TBM on Drawing No. 2)

b Vapour readings obtained using a portable Gastechtor 1238 ME calibrated to a hexane standard and operated in methane elimination mode.

m metres

mm millimetres

TABLE 2
SOIL ANALYTICAL RESULTS AND COMPARATIVE CRITERIA - BTEX/TPH (GAS/DIESEL AND HEAVY OILS)
(µg/g or ppm)

PARAMETER	BH1-3 (1.7 m)*	BH2-2 (1.1 m)*	BH3-2 (1.1 m)*	BH4-3 (1.8 m)*	BH5-3 (1.8 m)*	BH6-3 (1.8 m)*	MOE TABLE B CRITERIA[a]
Benzene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	25
Toluene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	150
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	1000
Xylenes	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	210
Total Petroleum Hydrocarbons[b] (gas/diesel)	<20	<20	<20	<20	<20	<20	2000
Total Petroleum Hydrocarbons[c] (heavy oils)	<100	<100	<100	<100	<100	<100	5000
Soil Headspace Vapour Concentration[d]	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm	-

Notes:

* Approximate depth below grade from which the soil sample was recovered.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for an industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

b Comprised of both purgeable and cold extractable hydrocarbons (C_6 to C_{24}).

c Comprised of hot extractable hydrocarbons (C_{25} and above).

d Vapour readings obtained using a portable Gastechtor 1238 ME calibrated to a hexane standard and operated in methane elimination mode.

-- No criteria specified under the MOE Table B Guidelines.

TABLE 2 (Continued)
SOIL ANALYTICAL RESULTS AND COMPARATIVE CRITERIA - BTEX/TPH (GAS/DIESEL AND HEAVY OILS)
(µg/g or ppm)

PARAMETER	BH7-2 (1.1 m)*	BH8-1 (0.3 m)*	BH9-2 (1.1 m)*	BH10-1 (0.3 m)*	BH11-4 (2.3 m)*	MOE TABLE B CRITERIA[a]
Benzene	<0.02	<0.02	<0.02	<0.02	<0.02	25
Toluene	<0.02	<0.02	<0.02	<0.02	<0.02	150
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02	1000
Xylenes	<0.06	<0.06	<0.06	<0.06	<0.06	210
Total Petroleum Hydrocarbons[b] (gas/diesel)	<20	<20	<20	<20	<20	2000
Total Petroleum Hydrocarbons[c] (heavy oils)	<100	<100	<100	<100	<100	5000
Soil Headspace Vapour Concentration[d]	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm	--

Notes:

* Approximate depth below grade from which the soil sample was recovered.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for an industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

b Comprised of both purgeable and cold extractable hydrocarbons (C_6 to C_{24}).

c Comprised of hot extractable hydrocarbons (C_{25} and above).

d Vapour readings obtained using a portable Gastechtor 1238 ME calibrated to a hexane standard and operated in methane elimination mode.

-- No criteria specified under the MOE Table B Guidelines.

TABLE 3
SOIL ANALYTICAL RESULTS AND COMPARATIVE CRITERIA
SELECTED METAL PARAMETERS
(mg/kg or ppm unless noted otherwise)

PARAMETER	BH3-3 (1.7 m*)	BH5-1 (0.3 m*)	BH9-1 (0.3 m*)	BH11-2 (1.1 m*)	MOE TABLE B CRITERIA[a]
Antimony	0.2	0.2	0.2	0.4	44
Arsenic	3.5	4.3	6.0	4.9	50
Barium	157	161	124	92	2000
Beryllium	0.7	0.9	1.1	0.9	1.2
Cadmium	<0.5	0.7	<0.5	0.6	12
Chromium (Hexavalent)	<1	<1	<1	<1	10
Chromium (Total)	22	29	27	25	1000
Cobalt	12	11	13	14	100
Copper	3	10	4	2	300
Cyanide (Free)	<0.02	0.04	<0.02	<0.02	100
Lead	10	16	10	10	1000
Mercury	0.01	0.06	0.03	0.01	10
Molybdenum	<3	<3	<3	<3	40
Nickel	27	21	26	29	200
Selenium	<0.2	0.3	0.3	<0.2	10
Silver	<1	<1	<1	<1	50
Vanadium	25	39	36	32	250
Zinc	60	84	59	66	800
Conductivity (mS/cm)	0.230	0.320	0.309	0.237	--
Sodium Adsorption Ratio	0.27	0.48	0.42	0.24	--
pH (pH units)	7.45	6.13	6.80	7.40	5 - 9

Notes:

* Approximate depth below grade from which the soil sample was recovered.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

-- No criteria specified under the MOE Table B Guidelines.

TABLE 4
SOIL ANALYTICAL RESULTS AND COMPARATIVE CRITERIA
Organochlorine Pesticides
(µg/g or ppm)

PARAMETER	Composite 1*	MOE TABLE B - Criteria[a]
Aldrin	<0.002	0.05
Alpha-BHC	<0.002	--
Beta-BHC	<0.002	--
Delta-BHC	<0.002	--
Gamma-BHC (Lindane)	<0.002	--
Alpha Chlordane	<0.002	0.29
Gamma Chlordane	<0.002	0.29
4,4'-DDD	<0.004	3.5
4,4'-DDE	<0.002	2.4
4,4'-DDT	<0.004	2.0
2,4'-DDT	<0.004	2.0
Dieldrin	<0.002	0.05
Endosulfan I	<0.004	0.29
Endosulfan II	<0.004	0.29
Endosulfan Sulphate	<0.004	0.29
Endrin	<0.004	0.05
Endrin Aldehyde	<0.010	0.05
Heptachlor	<0.002	0.15
Heptachlor Epoxide	<0.002	0.09
Methoxychlor	<0.040	4.0
Mirex	<0.004	--
Total PCBs	<0.05	25
Endrin Ketone	<0.004	0.05
Toxaphene	<0.3	--

Notes:

* "Composite 1" was comprised of shallow soils sampled from the upper 0.6 m of BH1 to BH11.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

-- No value specified under the MOE Table B guideline.

TABLE 5
SOIL ANALYTICAL RESULTS AND COMPARATIVE CRITERIA
Triazine Herbicides
(µg/g or ppm)

PARAMETER	Composite 1*	MOE TABLE B CRITERIA[a]
Prometon	<0.05	--
Propazene	<0.05	--
Atrazine	<0.05	--
Simazine	<0.05	--
Prometryn	<0.05	--
Ametryn	<0.05	--
Terbutryn	<0.05	--
Cyanazine	<0.20	--
Metribuzin	<0.05	--
Trifluralin	<0.05	--
Triallate	<0.20	--

Notes:

* "Composite 1" was comprised of shallow soils sampled from the upper 0.6 m of BH1 to BH11.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

-- No value specified under the MOE Table B guideline.

TABLE 6
SOIL ANAUYTICAL RESULTS AND COMPARATIVE CRITERIA
Polycyclic Aromatic Hydrocarbons
(ug/g or ppm)

PARAMETER	Composite 1*	MOE TABLE B CRITERIA[a]
1-Methylnaphthalene	<0.05	1600
2-Methylnaphthalene	<0.05	1600
Acenaphthene	<0.05	1300
Acenaphthylene	<0.05	840
Anthracene	<0.05	28
Benzo(a)anthracene	<0.05	40
Benzo(a)pyrene	<0.05	1.9
Benzo(b)fluoranthene	<0.05	19
Benzo(g,h,i)perylene	<0.05	40
Benzo(k)fluoranthene	<0.05	19
Chrysene	<0.05	19
Dibenzo(a,h)anthracene	<0.05	1.9
Fluoranthene	<0.05	40
Fluorene	<0.05	350
Indeno(1,2,3-cd)pyrene	<0.05	19
Naphthalene	<0.05	40
Phenanthrene	<0.05	40
Pyrene	<0.05	250

Notes:

* "Composite 1" was comprised of shallow soils sampled from the upper 0.6 m of BH1 to BH11.

a Ontario Ministry of the Environment's (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria for industrial/commercial land use in a non-potable groundwater condition with medium to fine textured soils.

TABLE 7
ONTARIO REGULATION 558 WASTE CLASSIFICATION
SOIL LEACHATE ANALYTICAL RESULTS
(mg/L unless otherwise noted)

Parameters		Composite 2*	ONTARIO REGULATION 558[a]
Inorganic Compounds	Arsenic	<0.2	2.5
	Barium	0.6	100
	Boron	0.2	500
	Cadmium	<0.05	0.5
	Chromium	<0.1	5.0
	Cyanide	<0.01	20
	Fluoride	0.1	150
	Lead	<0.1	5.0
	Mercury	<0.01	0.1
	Nitrate + Nitrite	<0.2	1000
	Selenium	<0.1	1.0
	Silver	<0.01	5.0
	Uranium	<0.01	10
Polychlorinated Biphenyls (Leachate)		<0.0002	0.3
Polychlorinated Biphenyls (Bulk)		<0.05	-
Ignitability	Units in °C	nfs	-

Notes:

* "Composite 2" was comprised of a composite of drill cuttings from BH1 to BH11.

a As per the Waste Classification Protocols outlined in the Ontario Regulation 558 Toxicity Classification Leaching Procedure (TCLP). The criteria for hazardous waste are based on leachate concentrations exceeding the allowable limits outlined in Ontario Regulation 558.

nfs Substance is classified as a non-flammable solid

TABLE 7 (continued)
ONTARIO REGULATION 558 WASTE CLASSIFICATION
SOIL LEACHATE ANALYTICAL RESULTS
(mg/L or ppm)

Parameters		Composite 2*	ONTARIO REGULATION 558[a]
Volatile Organic Compounds	1,1 Dichloroethylene	<0.01	1.4
	1,2 Dichlorobenzene	<0.01	20
	1,2 Dichloroethane	<0.01	0.5
	1,4 Dichlorobenzene	<0.01	0.5
	Benzene	<0.01	0.5
	Carbon Tetrachloride	<0.01	0.5
	Chloroform	<0.01	10
	Chlorobenzene	<0.01	8.0
	Dichloromethane	<0.05	5.0
	Methyl Ethyl Ketone	<0.50	200
	Tetrachloroethylene	<0.01	3.0
	Trichloroethylene	<0.01	5.0
	Vinyl Chloride	<0.02	0.2

Notes:

* "Composite 2" was comprised of a composite of drill cuttings from BH1 to BH11.

a As per the Waste Classification Protocols outlined in the Ontario Regulation 558 Toxicity Classification Leaching Procedure (TCLP). The criteria for hazardous waste are based on leachate concentrations exceeding the allowable limits outlined in Ontario Regulation 558.

TABLE 7 (continued)
ONTARIO REGULATION 558 WASTE CLASSIFICATION
SOIL LEACHATE ANALYTICAL RESULTS
(mg/L or ppm)

Parameter		[redacted]	[redacted] REGULATION 558
Semi-Volatile Organic Compounds	2,4 Dichlorophenol	<0.002	90
	2,4,5 Trichlorophenol	<0.002	400
	2,4,6 Trichlorophenol	<0.002	0.5
	2,3,4,6 Tetrachlorophenol	<0.002	10
	Pentachlorophenol	<0.008	6.0
	Pyridine	<0.02	5.0
	Total Cresol (m, p and o)	<0.002	200
	2,4 Dinitrotoluene	<0.002	0.13
	Nitrobenzene	<0.002	2.0
	Benzo(a)Pyrene	<0.0008	0.001

Notes:

* "Composite 2" was comprised of a composite of drill cuttings from BH1 to BH11.

a As per the Waste Classification Protocols outlined in the Ontario Regulation 558 Toxicity Classification Leaching Procedure (TCLP). The criteria for hazardous waste are based on leachate concentrations exceeding the allowable limits outlined in Ontario Regulation 558.

TABLE 8
GROUNDWATER ANALYTICAL RESULTS AND COMPARATIVE CRITERIA FOR BTEX
(µg/L or ppb)
Sampling Date: 03/12/30

Parameters	BH1	BH5	BH6	MOE Table B Criteria[a]
Benzene	<0.2	<0.2	<0.2	12 000
Toluene	<0.2	<0.2	<0.2	37 000
Ethylbenzene	<0.2	<0.2	<0.2	28 000
Xylenes	<0.6	<0.6	<0.6	35 000

Notes:

a Ontario Ministry of the Environment (MOE) *Guideline for Use at Contaminated Sites in Ontario* (dated February 1997, as amended) Table B criteria in a non-potable groundwater condition with medium to fine textured soils.

TABLE 9
GROUNDWATER ANALYTICAL RESULTS AND COMPARATIVE CRITERIA
Selected Inorganic Parameters
Sampling Date: 03/12/30
(µg/L or ppb)

PARAMETER	BH1	BH5	BH9	VOLUNTEER CRITERIA
Aluminum	13	6	28	--
Antimony	0.6	<0.5	<0.5	16 000
Arsenic	2	<2	<2	480
Barium	91	107	143	23 000
Beryllium	<1	<1	<1	53
Bismuth	<1	<1	<1	--
Boron	321	200	263	50 000
Cadmium	<0.1	<0.1	<0.1	11
Calcium	119 000	278 000	306 000	--
Chloride	189 000	1 070 000	937 000	--
Chromium (Hexavalent)	<10	<10	<10	110
Chromium (Total)	<5	<50	<50	2000
Cobalt	2.1	0.8	2.7	100
Copper	4.4	0.9	4.5	23
Cyanide, Free	<1	<1	<1	52
Iron	<30	<30	30	--
Lead	<0.5	<0.5	<0.5	32
Magnesium	28 200	75 200	96 200	--
Manganese	269	293	510	--
Mercury	<0.05	<0.05	<0.05	0.12
Molybdenum	42	5	25	7300
Nickel	7	2	6	1600
Nitrate (as N)	28 900	8 900	10 400	--
Nitrite (as N)	<200	<2000	<2000	--
Phosphorus	<50	<50	<50	--
Potassium	45 300	21 200	34 900	--
Selenium	<2	<2	<2	50
Silver	<0.1	<0.1	<0.1	1.2
Sodium	68 300	288 000	193 000	--
Strontium	1 820	3 870	4 140	--

Notes:
a Ontario Ministry of the Environment's (MOE), *Guideline For Use At Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria in a potable groundwater condition with medium to fine textured soils
– No value specified under the MOE Guideline.

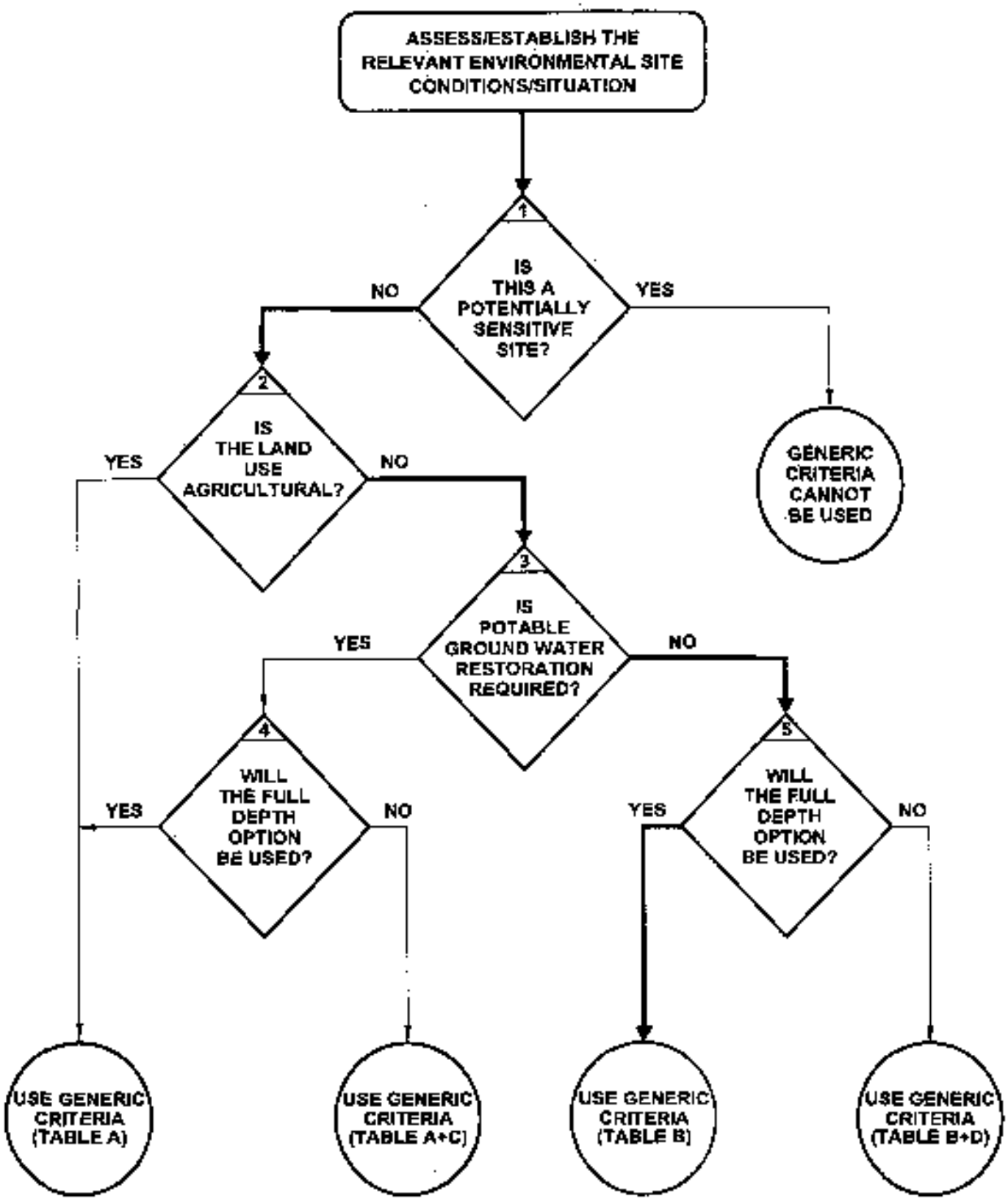
TABLE 9 - continued
GROUNDWATER ANALYTICAL RESULTS AND COMPARATIVE CRITERIA
Selected Inorganic Parameters
Sampling Date: 03/12/30
(µg/L or ppb)

PARAMETER	BH3	BH5	BH9	[redacted]
Thallium	<0.05	<0.05	<0.05	400
Tin	<1	<1	<1	--
Titanium	<5	<5	<5	--
Uranium	9.9	6.2	15.7	--
Vanadium	2.4	<5	<5	200
Zinc	<5	<5	25	1100

Notes:
a Ontario Ministry of the Environment's (MOE), *Guideline For Use At Contaminated Sites in Ontario* (dated February, 1997 as amended) Table B criteria in a potable groundwater condition with medium to fine textured soils
-- No value specified under the MOE Guideline.

APPENDIX A

GENERIC CRITERIA SELECTION
AND
GRAIN SIZE DISTRIBUTION ANALYSIS



THIS DRAWING IS ADOPTED FROM THE MOE RU DELINE FOR USE AT CONTAMINATED SITES IN ONTARIO DATED FEBRUARY 1997, AS AMENDED

GENERIC CRITERIA SELECTION

Job No.:	Fig. No.:	
ONT10802.1	1	
Date:	Dwn. by:	Appd.:
04/01/09	AA	TR

Jacques Whitford

GUIDE TO THE GENERIC CRITERIA SELECTION - Project No. ONT10802.001

Environmental Subsurface Investigation, Green Site Development
Proposed Retail Outlet No. 35207
845 Burloak Drive (at South Service Road), Oakville, Ontario

BOX 1. IS THIS A POTENTIALLY SENSITIVE SITE?

> **No.** The site does not appear to meet any of the prescribed criteria for sensitive sites. Proceed to Box 2.

BOX 2. IS THE LAND USE AGRICULTURAL?

> **No.** The present land use is agricultural. It is assumed that the proposed land use will be commercial/industrial. Proceed to Box 3.

BOX 3. IS POTABLE GROUNDWATER RESTORATION REQUIRED?

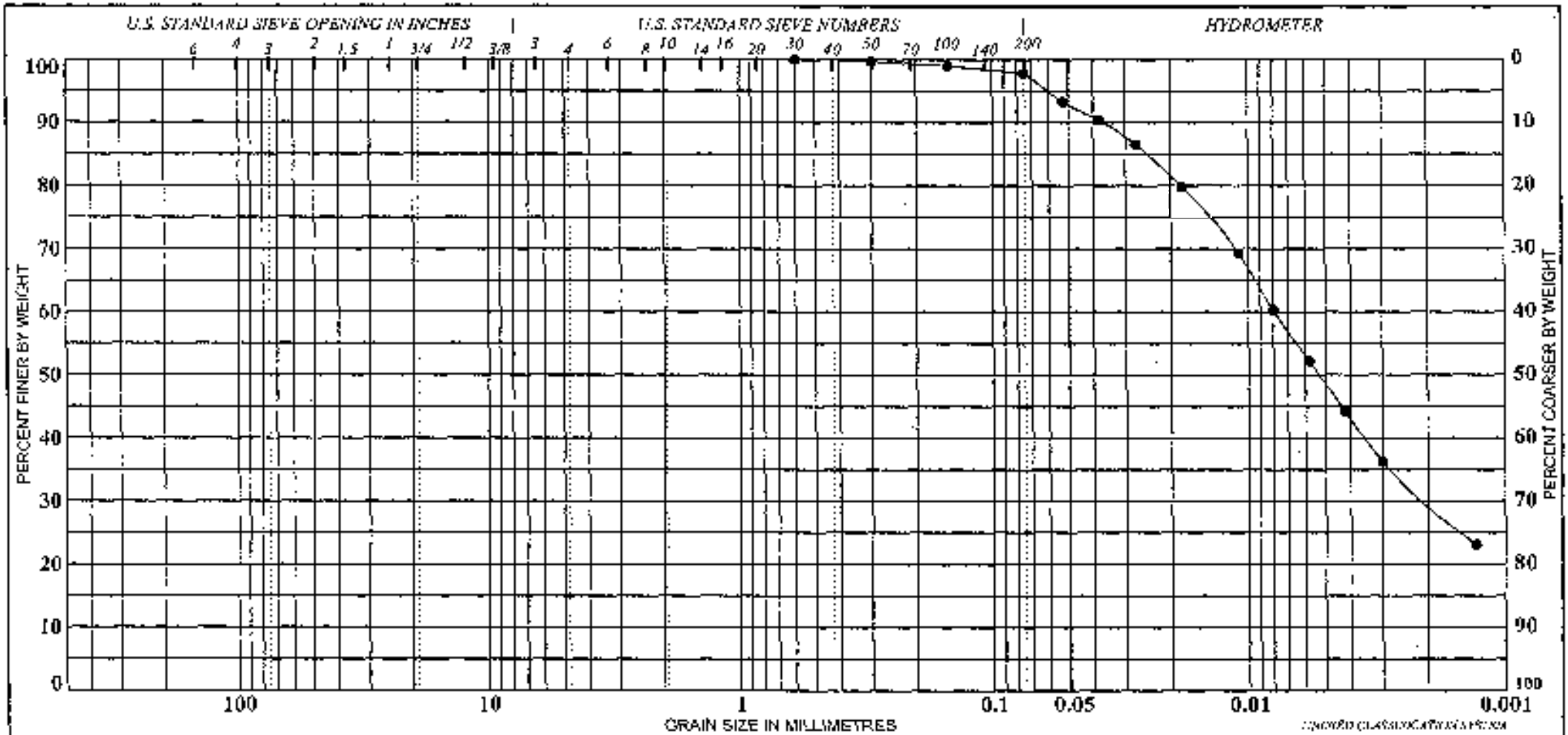
> **No.** A generic criteria selection (GCS) was conducted for the intended land use of the subject property by Jacques Whitford in accordance with the MOE's *Guideline for Use at Contaminated Sites in Ontario*, dated February, 1997 as amended. However, based on the results of the grain size analysis and the GCS, the MOE Table B restoration criteria for an industrial/commercial land use with medium / fine grained soils in a non-potable groundwater condition were applied to the site. Proceed to Box 5.

BOX 5. WILL THE FULL DEPTH OPTION BE USED?

> **Yes.** It is assumed that the full depth option will be used.

SOIL TEXTURE: Based on the results of the grain size analyses, the principal sub-soils (sandy silty clay) encountered at the site are estimated to have approximately 7% (by dry weight) particles equal to or greater than 50µ diameter (sand). Under Section 6.0 of the MOE Guideline, materials with less than 70% sand size particles are considered medium to fine textured.

Therefore the Table B criteria for an industrial/commercial land use in a potable groundwater condition with medium to fine textured soils have been applied to this site.



COBBLES	GRAVEL		SAND			SILT and CLAY	
	coarse	fine	coarse	medium	fine	SILT	CLAY

Specimen	Depth (m)	Description	W%	%Gravel	%Sand	%Silt	%Clay	% < 50 µ
BH4	1.1	Silty CLAY, trace shale fragments	12	0	2	68	30	7

Project: Petro-Canada
Location: 845 Burloak Drive (at South Service Road), Oakville
Project No.: ONT10802.001

GRADATION CURVE (ASTM D422-63(1998))
Figure: 2
Remarks:

APPENDIX B

BOREHOLE RECORDS

SYMBOLS AND TERMS USED ON THE BOREHOLE AND TEST PIT RECORDS

SOIL DESCRIPTION

Terminology describing common soil genesis:

Topsoil	-	mixture of soil and humus capable of supporting good vegetative growth
Peat	-	fibrous fragments of visible and invisible decayed organic matter
Till	-	unstratified and unsorted glacial deposit which may include particle sizes from clay to boulders
Fill	-	materials not identified as deposited by natural geological processes

Terminology describing soil structure:

Desiccated	-	having visible signs of weathering by oxidization of clay minerals, shrinkage cracks, etc.
Fissured	-	material breaks along plane of fracture
Varved	-	composed of regular alternating layers of silt and clay
Stratified	-	alternating layers or beds greater than 6mm (¼") thick
Laminated	-	alternating layers or beds less than 6mm (¼") thick
Blocky	-	material can be broken into small and hard angular lumps
Lensed	-	irregular shaped pockets of soil with differing textures
Seam	-	a thin, confined layer of soil having different particle size, texture, or color from materials above and below
Well Graded	-	having wide range in grain sizes and substantial amounts of all intermediate particles sizes
Uniformly Graded	-	predominantly one grain size

Soil descriptions and classification are based on the Unified Soil Classification System (USCS) (ASTM D-2488), which classifies soils on the basis of engineering properties. The system divides soils into three major categories: (1) coarse grained, (2) fine-grained, and (3) highly organic. The soil is then subdivided based on either gradation or plasticity characteristics. This system provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification. The classification excludes particles larger than 76 mm.

Terminology describing materials outside the USCS, (e.g. particles larger than 76 mm, visible organic matter, construction debris) is based upon the proportion of these materials present:

Trace or occasional	Less than 10%
Some	10-20%
With	20-30%

The standard terminology to describe cohesionless soils includes the compactness as determined by the Standard Penetration Test 'N'-value*.

Compactness	'N'-value
Very loose	<4
Loose	4-10
Compact	10-30
Dense	30-50
Very dense	>50

Continued Next Page

SYMBOLS AND TERMS USED ON THE BOREHOLE AND TEST PIT RECORDS

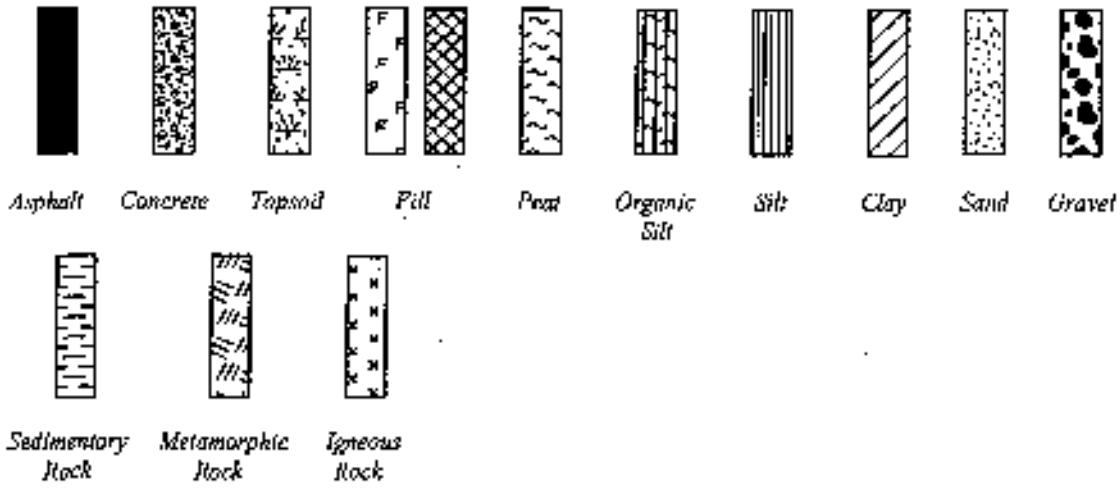
The standard terminology to describe cohesive soils includes consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer tests, unconfined compression tests or similar field and laboratory analysis. Standard Penetration Test 'N'-values* can also be used to provide an approximate indication of the consistency and shear strength of fine grained, cohesive soils.

Consistency	Undrained Shear Strength (kPa)	'N'-Value
Very Soft	<12.5	<2
Soft	12.5-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

Note: *'N'-VALUE- The Standard Penetration Test records the number of blows of a 140 pound (64kg) hammer falling 30 inches (760mm), required to drive a 2 inch (50.8mm) O.D. split spoon sampler 1 foot (305mm). For split spoon samples where full penetration is not achieved, the number of blows is reported over the sampler penetration in millimeters (e.g. 50/75).

STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols:



WATER LEVEL MEASUREMENT

Open Borehole or Test Pit

Monitoring Well, Piezometer or Standpipe

SAMPLE TYPE

SS	Split spoon sample (obtained from the Standard Penetration Test)
TW	Thin Wall Sample or Shelby Tube
PS	Piston sample
GS	Grab sample
AS	Auger sample
BS	Bulk sample
WS	Wash sample
HQ, NQ, BQ,etc.	Rock core samples obtained with the use of standard size diamond drilling bits.

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH1

CLIENT Petro-Canada — PROJECT No. ONT10802.00

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 22, 2003 — WATER LEVEL — TPC ELEV. --

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE
0	99.38				
	99.3	125 mm of TOPSOIL			
		Red with grey seams, soft, Silty CLAY, trace shale fragments, damp	SS	1	4
1			SS	2	22
		- hard	SS	3	50/130
2	96.8				
		Red with grey seams, SHALE	AS	4	
3	96.2				
		END OF BOREHOLE AT APPROXIMATELY 3.2 m Borehole dry upon completion			
4					
5					
6					

VAPOUR CONCENTRATIONS
● %LEL ▲ ppm
● 20 40 60 80
▲ 100 200 300 400

WELL CONSTRUCTION

LABORATORY ANALYSES: BH1-3 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH2

CLIENT Petro-Canada

PROJECT No. ONT10802.001

LOCATION 845 Burloak Drive (at South Service Road), Oakville

DATUM Local

DATES: BORING December 22, 2003

WATER LEVEL --

TPC ELEV. --

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80; ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	99.22				0					
	99.1	125 mm of TOPSOIL								
		Red with grey seams, soft, Silty CLAY, trace shale fragments, damp			1		SS	1	4	
					2					
1		- very stiff			3		SS	2	22	
					4					
					5					
		- hard			6		SS	3	SW 130	
2					7					
	96.6				8		AS	4		
		Red with grey seams, SHALE			9					
3	96.1				10		AS	5		
		END OF BOREHOLE AT APPROXIMATELY 3.1 m			11					
		Borehole dry upon completion			12					
					13					
4					14					
					15					
					16					
5					17					
					18					
					19					
6										

LABORATORY ANALYSES: BH2-2 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD ENVIRONMENT LIMITED

BOREHOLE RECORD

BH3

CLIENT: Petro-Canada

PROJECT No: ONT10802.001

LOCATION: 845 Burloak Drive (at South Service Road), Oakville

DATUM: Local

DATES: BORING: December 22, 2003 WATER LEVEL: December 30, 2003

TPC ELEV.: 99.88

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	VAPOUR CONCENTRATIONS (● %LEL ▲ ppm)	WELL CONSTRUCTION
0	99.24						
	99.1	125 mm of TOPSOIL					
		Red with grey seams, firm, Silty CLAY, trace shale fragments, damp	SS	1	7		50 mm ID solid PVC pipe with bentonite seal
1		- very stiff	SS	2	17		50 mm ID slotted PVC pipe with silica sand backfill
2		- hard	SS	3	31		
			SS	4	50/ 130		
3	96.2	Red with grey seams, SHALE	SS	5	50/ 51		
			AS	6			
4	95.0	END OF BOREHOLE AT APPROXIMATELY 4.3 m Cave in to approximately 3.4 m Borehole dry upon completion					
5							
6							

LABORATORY ANALYSES: BH3-2 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).
BH3-3 submitted for analysis of select metal parameters.
Groundwater sample submitted for analysis of BTEX and select inorganic parameters.

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH4

CLIENT Petro-Canada — PROJECT No. ONT10802-001

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 23, 2003 — WATER LEVEL — TPC ELEV. - -

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80; ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	99.04				0					
	98.9	150 mm of TOPSOIL								
		Red with grey seams, soft, Silty CLAY, trace shale fragments, damp			1		SS	1	4	
1		- very stiff			3		SS	2	27	
	97.1	- hard			6		SS	3	50/ 130	
2		Red with grey seams, SHALE			7		SS	4	26/ 25	
3	96.0	END OF BOREHOLE AT APPROXIMATELY 3.1 m			10					
		Borehole dry upon completion			11					
4					13					
					14					
5					15					
					16					
					17					
6					18					
					19					

LABORATORY ANALYSES: BH4-3 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH5

CLIENT Petro-Canada
LOCATION 845 Budoak Drive (at South Service Road), Oakville
DATES: BORING December 22, 2003 WATER LEVEL: December 30, 2003
PROJECT No ONT10802.006
DATUM Local
TPC ELEV. 99.04

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.95					
	98.8	150 mm of TOPSOIL				50 mm ID solid PVC pipe with bentonite seal
		Red with grey seams, firm, Silty CLAY, trace shale fragments, damp	SS	1	5	
1		- very stiff	SS	2	15	50 mm ID slotted PVC pipe with silica sand backfill
		- hard	SS	3	50/ 150	
	97.0					
2		Red with grey seams, SHALE	SS	4	50/ 25	
3						
4	94.4					
		END OF BOREHOLE AT APPROXIMATELY 4.6 m Borehole dry upon completion				
5						
6						

VAPOUR CONCENTRATIONS
● %LEL ▲ ppm
● 20 40 60 80
▲ 100 200 300 400

LABORATORY ANALYSES: BH5-1 submitted for analysis of select metal parameters.
BH5-3 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).
Groundwater sample submitted for analysis of BTEX and select inorganic parameters

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH6

CLIENT Petro-Canada — PROJECT No ONT10802.001

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 22, 2003 — WATER LEVEL — TPC ELEV. --

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80 / ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.86				0					
	98.7	125 mm of TOPSOIL								
		Red with grey seams, very stiff, Silty CLAY, trace shale fragments, damp			1		SS	1	24	
1					2					
					3		SS	2	24	
		- hard			4					
					5		SS	3	50/ 140	
2	96.7				6					
		Red with grey seams, SHALE			7		SS	4	50/ 25	
					8					
					9					
3	95.7				10					
		END OF BOREHOLE AT APPROXIMATELY 3.1 m			11					
		Borehole dry upon completion			12					
					13					
4					14					
					15					
					16					
5					17					
					18					
					19					
6										

LABORATORY ANALYSES: BH6-3 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH7

CLIENT Petro-Canada — PROJECT No. ONT10802.00

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 23, 2003 — WATER LEVEL — TPC ELEV.

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80; ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	99.00				0					
	98.8	150 mm of TOPSOIL								
		Red with grey seams, firm, Silty CLAY, trace shale fragments, damp			1		SS	1	6	
1		- very stiff			2					
					3		SS	2	31	
		- hard			4					
					5		SS	3	50/100	
2	97.0				6					
		Red with grey seams, SHALE			7					
					8		SS	4	50/51	
3	96.0				9					
		END OF BOREHOLE AT APPROXIMATELY 3.1 m			10					
		Borehole dry upon completion			11					
					12					
4					13					
					14					
					15					
5					16					
					17					
					18					
6					19					

LABORATORY ANALYSES: BH7-2 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD ENVIRONMENT LIMITED

BOREHOLE RECORD

BH8

CLIENT Petro-Canada

PROJECT No. ONT10802.001

LOCATION 845 Burloak Drive (at South Service Road), Oakville

DATUM Local

DATES: BORING December 23, 2003

WATER LEVEL

TPC ELEV --

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.63				0	● 20 40 60 80 ▲ 100 200 300 400				
	98.5	150 mm of TOPSOIL								
		Red with grey seams, soft, Silty CLAY, trace shale fragments, damp			1		SS	1	4	
1					2					
		- very stiff			3		SS	2	42	
		- hard			4					
	97.1				5		SS	3	50/ 25	
		Red with grey seams, SHALE			6					
2	96.3				7					
		END OF BOREHOLE AT APPROXIMATELY 2.3 m			8					
		Borehole dry upon completion			9					
3					10					
					11					
					12					
4					13					
					14					
					15					
5					16					
					17					
					18					
6					19					

LABORATORY ANALYSES: BH8-1 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH9

CLIENT Petro-Canada — PROJECT No. ONT10802.001

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 22, 2003 — WATER LEVEL December 30, 2003 — TPC ELEV 99.70

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.75					
	98.6	150 mm of TOPSOIL				50 mm ID solid PVC pipe with bentonite seal
1		Red with grey seams, firm, Silty CLAY, trace shale fragments, damp	SS	1	3	
		- stiff	SS	2	14	50 mm ID slotted PVC pipe with silica sand backfill
2		- hard	SS	3	51	
	96.2		SS	4	50/ 150	
3		Red with grey seams, SHALE				
4	94.8	END OF BOREHOLE AT APPROXIMATELY 4.0 m Borehole dry upon completion				
5						
6						

VAPOUR CONCENTRATIONS — ● %LEL ▲ ppm

● 20 40 60 80
▲ 100 200 300 400

LABORATORY ANALYSES: BH9-1 submitted for analysis of select metal parameters.
BH9-2 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).
Groundwater sample submitted for analysis of BTEX and select inorganic parameters.

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH10

CLIENT: Petro-Canada — PROJECT No.: ON10802.001

LOCATION: 845 Burloak Drive (at South Service Road), Oakville — DATUM: Local

DATE: BORING: December 22, 2003 — WATER LEVEL: — TPC ELEV.: --

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80; ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.32				0					
	98.2	150 mm of TOPSOIL								
		Red with grey seams, firm, Silty CLAY, trace shale fragments, damp			1		SS	1	7	
1					2					
		- very stiff			3		SS	2	26	
					4					
		- hard			5		SS	3	50/ 130	
2					6					
					7		SS	4	50/ 25	
	95.6				8					
		Red with grey seams, SHALE			9					
3	95.2				10		SS	5	50/ 25	
		END OF BOREHOLE AT APPROXIMATELY 3.1 m			11					
		Borehole dry upon completion			12					
4					13					
					14					
					15					
5					16					
					17					
					18					
6					19					

LABORATORY ANALYSES: BH10-1 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils)

JACQUES WHITFORD
ENVIRONMENT LIMITED

BOREHOLE RECORD

BH11

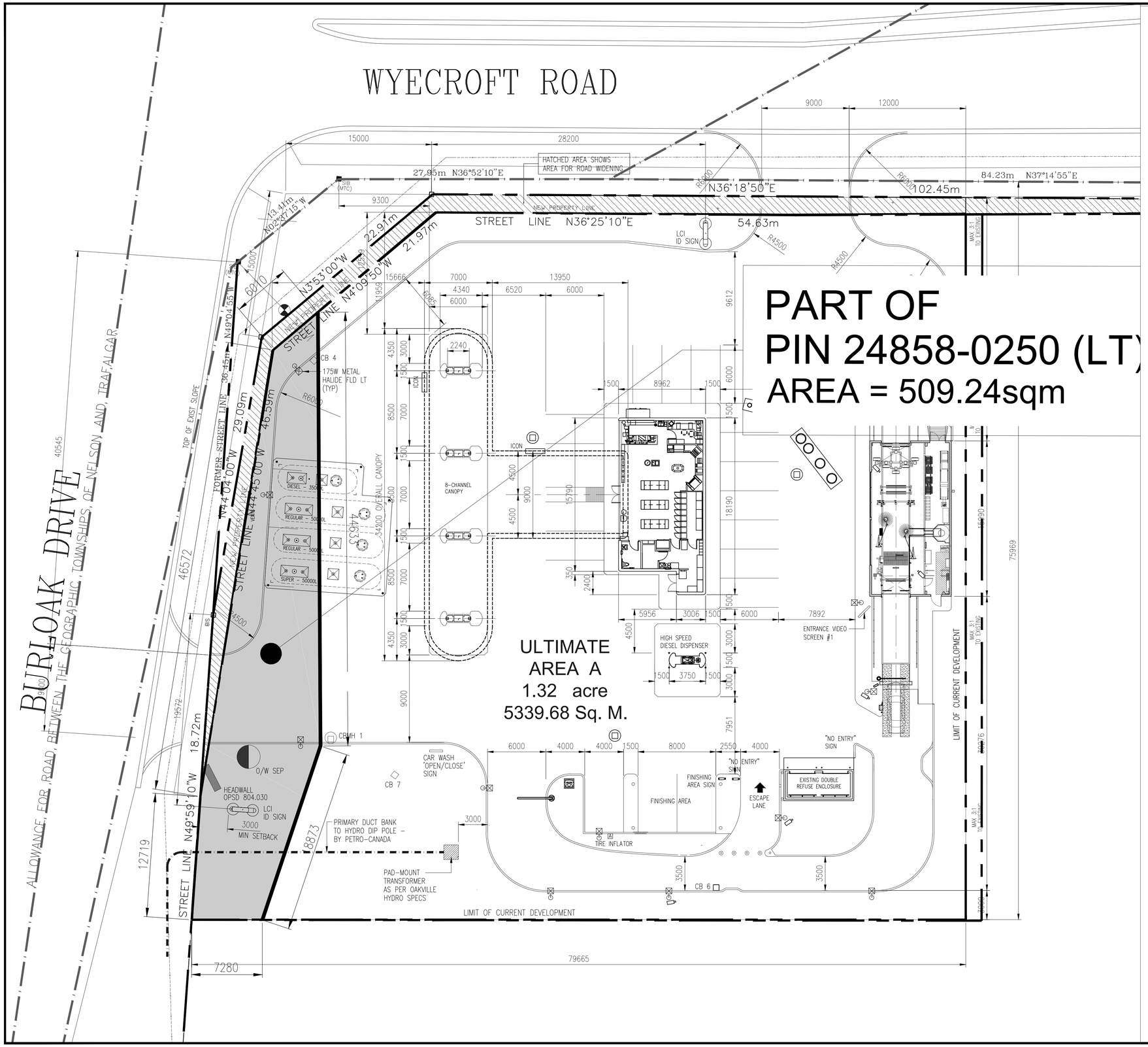
CLIENT Petro-Canada — PROJECT No. ONT10802.001

LOCATION 845 Burloak Drive (at South Service Road), Oakville — DATUM Local

DATES: BORING December 23, 2003 — WATER LEVEL — TPC ELEV.

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	VAPOUR CONCENTRATIONS ● %LEL ▲ ppm (● 20 40 60 80 ▲ 100 200 300 400)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES N-VALUE	WELL CONSTRUCTION
0	98.55				0					
	98.4	125 mm of TOPSOIL								
		Red with grey seams, soft, Silty CLAY, trace shale fragments, damp			1		SS	1	4	
					2					
1		- very stiff			3		SS	2	30	
					4					
		- hard			5		SS	3	50/ 70	
					6					
2					7					
	96.1				8		SS	4	50/ 70	
		Red with grey seams, SHALE			9					
3	95.4				10		AS	5		
		END OF BOREHOLE AT APPROXIMATELY 3.1 m			11					
		Borehole dry upon completion			12					
					13					
4					14					
					15					
5					16					
					17					
					18					
6					19					

LABORATORY ANALYSES: BH11-2 submitted for analysis of select metal parameters.
BH11-4 submitted for analysis of BTEX and TPH (gas/diesel and heavy oils).



SURVEYOR'S REAL PROPERTY REPORT
PART 1) PLAN OF

PART OF LOT 35
CONCESSION 3
SOUTH OF DUNDAS STREET

GEOGRAPHIC TOWNSHIP OF TRAFALGAR
TOWN OAKVILLE
REGIONAL MUNICIPALITY HALTON

NOTE

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO SOUTH LIMIT OF SOUTH SERVICE ROAD, HAVING A BEARING OF N38°18'E IN ACCORDANCE WITH DEPOSIT PLAN 858.

BENCHMARK

BM #460: BRASS PLAQUE ON SOUTHWEST END OF CONCRETE BOX CULVERT LOCATED OVER SHELDON CREEK BETWEEN GATEWAY DRIVE AND CENTURY DRIVE.
ELEVATION = 113.270m

TEMPORARY BENCH MARK

HORIZONTAL CONTROL MONUMENT No. ???
LOCATED AT THE SOUTHERLY CORNER OF BURLOAK DRIVE AND HARVESTER ROAD
ELEVATION = 109.98 metres.

LEGEND

■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT SET
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES IRON BAR
SSIB	DENOTES SHORT STANDARD IRON BAR
P1	DENOTES PLAN 20R-6712
P2	DENOTES PLAN 20R-7195
OH	DENOTES OVERHEAD HYDRO
OB	DENOTES OVERHEAD BELL
UB	DENOTES UNDERGROUND BELL
ST	DENOTES STORM SEWER
T	DENOTES TRAFFIC LIGHT ELECTRICAL

REVISED : DECEMBER 23rd., 2003 - JOB No. 18020
TO SHOW ADDITIONAL TOPOGRAPHIC INFORMATION AT THE INTERSECTION OF HARVEST ROAD AND BURLOAK DRIVE AND TO SHOW GRID BEARINGS AND CO-ORDINATES.
CENTRE LINE OF ALLOWANCE FOR ROAD ADDED JANUARY 12, 2004

SITE DATA: ZONE C3A

TOTAL PC PROPERTY	*22,006.32 SQ M (5.5 ACRES)*
TOTAL PC DEVELOPMENT	*5339.68 SQ M (1.32 ACRES)*

EXISTING BUILDINGS:

SERIES 1500	*148.7 SQ M*
16m CAR WASH	*137.9 SQ M*
REFUSE ENCL 6.9m x 2.9m	*20.01 SQ M*
TOTAL	*306.61 SQ M (5.7%)*
LANDSCAPED AREA	*1259.29 SQ M (23.6%)*
CONCRETE SURFACE AREA	*667.92 SQ M (12.5%)*
ASPHALT PAVED AREA	*3105.86 SQ M (58.2%)*
CONCRETE CURBING	*445 LINEAL METRES*

SHOWN: 17 PARKING SPACES
(16 @ 3m x 6m, 1 @ 4.6m x 6m HCP)
10 VEHICLE CAR WASH STACKING
(10 @ 3m x 6m)
3 FINISHING STATION SPACES
(3 @ 4m x 6m)
FLOODLIGHT: 12 required
STREET ID SIGN: 2 EXISTING

Metric

- ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.
- CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DESCREPANCIES TO BE REPORTED TO THE PROJECT DESIGNER.
- DO NOT SCALE DRAWINGS

Revisions

REV.	DESCRIPTION	DRAWN	APP'D.	DATE
6	DIESEL TANK/DISPENSER ADDED, WIDENING AS PER DRAFT PLAN SHOWN, SITE DATA ADJUSTED, NEW DWG SCALE	FAH		2004FEB02
7	ACCESS RAMPS SHOWN TAPERING TO EXIST ROADS, NEW TEMPORARY ASPHALT CURBS/NEW CSP CULVERTS ADDED	FAH		2004FEB10
8	REMOTE DIESEL ISLAND ADDED, MODIFIED VACUUM, TIREFLATOR AND PARKING LAYOUT TO SUIT	FAH		2004FEB20
9	PROPOSED WIDENING UPDATED REVISED FOR CONSTRUCTION	FAH		2004MAR22
10	ISSUED FOR CONSTRUCTION	FAH		2004MAR30
11	LOCATION OF NEW PYLON SIGNS ADJUSTED TO 3m MIN SETBACK AS REQ'D BY CITY.	FAH		2004MAY10
12	LOCATION OF NEW HYDRO TRANSFORMER REVISED, NOTES ADDED RE PRIMARY DUCT BANK	FAH		2004MAY27
13	HYDRO TRANSF LOCATION "AS BUILT"	FAH		2005JUL04
14	UPDATE DWG AS PER EXISTING CONDITION	DG		2009-06-15
15	IDENTIFIED EX. PROPERTY LINES	AJ		2009-08-26
16	UPDATE SITE PLAN AS PER POE RECONFIGURATION LATEST STD	DG		20011-04-28
17	OVERLAY OF 5 YEAR TEMPORARY EASEMENT	JN		2019-10-02

MARKET MANAGER

APPROVED BY: _____

DATE: _____

SIGNATURE: _____

BUSINESS DEVELOPMENT REPRESENTATIVE

APPROVED BY: _____

DATE: _____

SIGNATURE: _____

DISTRIBUTION APPROVAL

APPROVED BY: _____

DATE: _____

SIGNATURE: _____

PETRO-CANADA

CENTRAL_OFFICE

DRAWING TITLE:

PLOT PLAN
8 CHANNEL, S1500
CAR WASH

PROJECT:

845 BURLOAK DRIVE @
SOUTH SERVICE ROAD
OAKVILLE, ONTARIO

DRAWN BY: FAH	CAD INFO.:
DRAWING SCALE: 1=300	SHEET SIZE D (559 x 864)
DATE DRAWN: 2004JAN22	PETRO-CANADA CAD FILE No. C02-0282
CHECKED BY:	CONSULTANT CAD FILE No.
APPROVED BY:	PLOT SCALE 1=300
	PLOT DATE
	PLOT CONFIGURATION PARAMETERS
STD No./OUTLET No. 35207	SHEET No. SP1

Appendix VI Previous Environmental Reports

TERRAPEX
Environmental Ltd.

SUNCOR ENERGY PRODUCTS INC.

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

FINAL REPORT

845 BURLOAK DRIVE
OAKVILLE, ONTARIO

FEBRUARY 2010

DISTRIBUTION: SUNCOR ENERGY PRODUCTS INC. 1 COPY
TERRAPEX ENVIRONMENTAL LTD. 1 COPY

PROJECT # CB389.00

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EXECUTIVE SUMMARY

Terrapex Environmental Ltd. (Terrapex) was retained by Suncor Energy Products Inc. (Suncor) to conduct a Phase I Environmental Site Assessment (ESA) of the severance property located at 845 Burloak Drive in Oakville, (the site). The Phase I ESA was required by Suncor as due diligence prior severance of the surplus portion of the property for sale.

The objective of the project was to identify actual and/or potential sources of environmental liability the site associated with current and/or historical activities on the site and neighbouring properties.

The Phase I ESA was conducted in general accordance with the principles set out in Canadian Standards Association (CSA) Standard Z768-01, *Phase I Environmental Site Assessment*. The scope of work comprised a review of available historic and current environmental information; an inspection of the site, and accessible neighbouring sites for evidence of potential environmental concerns; interviews and preparation of this report documenting the findings.

The site is located in the southeast corner of the intersection Burloak Drive/Wyecroft Road Road, in an area of predominantly commercial land use. At the time of the Phase I ESA the site consisted of a L-shaped vacant green space, which is bordered by a Petro Canada retail fuel outlet to the west. A recent Phase II ESA completed by Terrapex in December 2009 did not identify any evidence of petroleum hydrocarbon related impacts to soil and groundwater on the site.

Based on the findings of the Phase I ESA, the presence of the adjacent retail fuel outlet and the nearby refinery represent a potential for petroleum hydrocarbon impacts. However, the recently conducted Phase II ESA did not identify any petroleum hydrocarbon impacts to soil or groundwater exceeding the applicable Ontario Regulation 153/04 Table 2 Site Condition Standards.

It is our opinion that the site currently meets the Ontario Regulation 153/04 Standards for commercial land use in a potable groundwater situation.

1.0 INTRODUCTION

Terrapex Environmental Ltd. (Terrapex) was retained by Suncor Energy Products Inc. (Suncor) to conduct a Phase I Environmental Site Assessment (ESA) of the severance property located at 845 Burloak Drive in Oakville, (the site). The Phase I ESA was required by Suncor as due diligence prior severance of the surplus portion of the property for sale.

1.1 SITE DESCRIPTION

The site is located in the northeast corner of the intersection Burloak Drive/Wyecroft Road Road, in an area of predominantly commercial land use. While the property formerly included the Petro-Canada retail fuel outlet located on the southeast corner of Burloak Drive and Wyecroft Road, the subject site of this ESA includes only the L-shaped parcel of surplus vacant land around the Petro Canada outlet.

The site location and general site layout are provided on Figures 1 and 2.

1.2 OBJECTIVES

The objective of the project was to identify actual and/or potential sources of environmental liability at the site associated with current and/or historical activities on the site and neighbouring properties.

2.0 PHASE I ESA

2.1 SCOPE OF WORK

The Phase I ESA was conducted in general accordance with the principles set out in Canadian Standards Association (CSA) Standard Z768-01, *Phase I Environmental Site Assessment*. The scope of work comprised:

- a review of available historic and current environmental information;
- an inspection of the site, and accessible neighbouring sites for evidence of potential environmental concerns;
- interviews; and,
- preparation of this report documenting the findings.

2.2 WORK PROGRAM

2.2.1 RECORDS REVIEW

The following sources of information were searched and/or reviewed as part of the records review:

- Aerial photographs available from Ecolog ERIS, for the year 1960, 1974 and 1985 as well as the current satellite image from the Google Earth website.
- Maps for the site and surrounding areas as follows:
    - Topographic map: Ontario topo50, SoftMap Technologies Inc., 2001, based on information from 1989 (1:50 000);
    - *Quaternary Geology of Ontario, Southern Sheet, Map 2556*, Ministry of Northern Development and Mines, 1991;
    - *Bedrock Geology of Ontario, Southern Sheet, Map 2544*, Ministry of Northern Development and Mines, 1991; and,
    - *The Physiography of Southern Ontario*, Chapman and Putnam, Ontario Research Foundation, 1966;
- Directories for the City of Oakville, provided from Ecolog Eris;
- RMS Risk Management Environmental Services, Fire Insurance Plans, Underwriters' Plans and Reports;
- Government and other databases available through EcoLog ERIS for records within approximately 250 m of the site;

- Records related to the site under the Database of Licenced Fuel Outlets, available through the Technical Standards and Safety Authority (TSSA);
- Requests for file information from:
    - Ministry of the Environment (MOE) Freedom of Information (FOI) Office regarding environmental concerns, such as waste generator registration numbers and waste class codes assigned to the site, Certificates of Approval, spill notifications, violations, complaints, or control orders;
    - MOE Water Well Record Department, from ERIS Ecolog, regarding water well records within a 250 m radius of the site;
    - The City of Burlington regarding planning information; and,
    - Previous environmental reports completed for Suncor.

2.2.2 SITE INSPECTION

The site inspection was conducted by Mark van Oord of Terrapex on December 15, 2009 using Terrapex's standard Phase I ESA checklist. The subject site and accessible neighbouring properties were inspected for evidence of potential environmental concerns such as regulated substances, former and existing underground and aboveground storage tanks (USTs and ASTs), miscellaneous wastes and debris, hazardous materials, filled areas, surface staining and stressed vegetation. Recently, Terrapex conducted a Phase II ESA to evaluate the subsurface conditions at the site.

2.2.3 LIMITATIONS

It should be noted that although Terrapex has attempted to verify information wherever possible, except where explicitly noted we have relied upon the accuracy of information collected during the records review and interview process. Information has not yet been received from the MOE Freedom of Information Office.

All areas of the site were accessible during the inspection. Observations of surrounding properties were limited to areas visible from the site or from publicly accessible vantage points. Interior inspections of neighbouring properties were not conducted.

3.0 RESULTS AND DISCUSSION

3.1 RECORDS REVIEW

3.1.1 AERIAL PHOTOGRAPHS

In the 1960 aerial photograph, the site appears to be a farm field/ vacant green land. There are no structures on-site. The CN rail tracks appear to the southeast and the QEW to the north/northwest. The surrounding areas are predominantly agricultural lands. The Petro Canada Refinery and Bronte Creek beyond are located to the northeast.

In the 1974 aerial photograph, the site appears to be similar to the 1960 photograph. The most significant difference is the extension of the petroleum refinery to the southeast and the new development of residential areas to the south.

In the 1985 aerial photograph, the site appears as undeveloped green land. Additional commercial properties are visible southwest of the site. The extension of the refinery, which appeared on the 1974 photo, had been partly removed. The Burloak Drive/south service Road//QEW interchange appears to the northwest of the subject site.

The 2009 satellite image reveals a retail fuel outlet being located in the southwest corner of the rectangular subject property, creating the remaining L-shaped subject site. More industrial/commercial development appears to the northwest, southwest and south of the property. The Wyecroft Road extension is visible. The property to the southeast (former refinery section) is now vacant land.

Copies of the aerial photographs and the satellite image are provided in Appendix I.

3.1.2 PHYSIOGRAPHIC AND HYDROGEOLOGIC RECORDS

Topographic Mapping: According to the topographic map that was reviewed, the site is mapped at an elevation of approximately 110 m above mean sea level in an area of undeveloped land. The closest water body to the site is a small tributary of Bronte Creek, approximately 180 m to the northeast from the centre of the subject site.

Geologic Mapping: The quarternary geology of the site and surrounding areas is formed by predominantly silt to silty clay matrix; high in matrix carbonate content and clast poor.

Bedrock geology comprises Upper Ordovician limestone, shale, limestone, dolostone and siltstone of the Queenston Formation.

The site is located in a physiographic region known as the Iroquois Plain. The Iroquois plain extends around the western part of Lake Ontario, from the Niagara River to Trent River. Conditions within the Iroquois plain vary greatly, from sandy soils, underlain by clay to the flat lake plain with bedrock at shallow depths.

Water Well Records: Water well records for the site and surrounding lands within a radius of approximately 250 metres were obtained from Ecolog Eris. Based on the search there are no wells within 250 m of the site

3.1.3 PROPERTY USE RECORDS

City Directories: Ecolog ERIS conducted a city directory search based on the entries in *Vernon's Burlington and Hamilton Suburban City Directory,* which contains address listings from 1957-2008, and on *Polk Canada Ltd: Halton/Peel Regions, Ontario Criss Cross Directory*, containing listings from 1958-2000. It appears that development for the site and surrounding properties started to occur after 1989. The site address was not listed in any of the databases searched.

Based on the GIS interactive maps of the Town of Oakville and the City of Burlington, the following addresses were also searched:

- West and northwest: 3549 and 3531 Wyecroft Road;
- Southwest: 5593; and,
- South/southeast: 5530 Harvester Road and 677 Burloak Drive.

All listings for adjacent addresses searched were primarily commercial and light industrial operations. The address 5530 Harvester Road was listed as an industrial manufacturing facility in 1994. An Esso retail fuel outlet and a Tim Horton's restaurant were listed in 2008 at 5539 Harvester Road.

A copy of this document is included in Appendix II.

Land Title Search: The land title search indicated that the site was transferred from 1427814 Ontario Limited to Petro Canada in 2003.

A copy of this document is included in Appendix III.

***RMS Documents*:** RMS did not locate any records for the subject site.

A copy of the document is included in Appendix IV.

3.1.4 DATABASE RECORDS

Ecolog ERIS: The following sections summarize the records found by EcoLog ERIS for the site and surrounding properties within a 250 m search radius for the databases searched. A copy of the EcoLog ERIS report is included in Appendix V.

Site (845 Burloak Drive):

A part of the site was listed as a Petro-Canada full service retail gasoline station. The records indicated four fuel underground storage tanks with capacities of 50,000 L (three tanks) and 35,000 L (one tank) were issued a license in August 2007 and 2008. The tanks were installed in 2004.

Surrounding Areas:

Southwest of Site (5510 Harvester Road): This southwesterly property was listed as an industrial facility operated by Fisher Services. The property was registered as waste generator between 1992 and 1998, by Fisher Services, and in 1999/2000 by Fisher Services - out of business. The wastes were generated included: paint/pigment/coating residues, other specific inorganics, acid wastes-other metals, and petroleum distillates.

North/northwest of Site (NW corner of Burloak Drive and Harvester): Ecolog ERIS indicated that for this property an ERIS historical search (complete report, order number 200110913001) was conducted in 2001.

Southwest of Site (5539 Harvester Road): For this property, a license for three gasoline underground storage tanks was issued in March 2003. The tanks were installed in 2002. One record in the retail fuel storage tanks was found for the same property, and the company operating this gas station was identified as Burloak Harvester Esso.

South/southwest of Site (5530, 5490 and 5499 Harvester Road): Ecolog ERIS located records for these three properties in the Scott's Manufacturing Directory. Long Manufacturing Ltd. (Established in 1885) was listed at *5530 Harvester Road*, Burlington. The company was described as a manufacturer of boilers, motor vehicle parts and accessories, power boiler and heat exchanger and light duty vehicles. The property at *5490 Harvester Road* was listed as being occupied by Precision Metal Cutting (est. in 2004). This company manufactures fabricated metal products and steel wires. The same company was listed as waste generator. The waste generated was identified as emulsified oils. Two other companies at the same address were also listed as waste generators: FAB INDUSTRIES INC. generates wastes consisting of waste oils and lubricants. Navona Realty Services Inc. was identified as waste generator of petroleum distillates and waste oils and lubricants. Scott's Manufacturing Directory contained one record for the address *5499 Harvester Road*. Aero-Kit Industries Inc. (est. in 1978) manufactures motor vehicle seating and interior trim

products. The company also distributes new motor vehicle parts and accessories.

Southeast of Site (Parts of Lot 35, Conc. 3, Town of Oakville): The Ontario Regulation 347 Waste Generators Summary data base contained three entries for this property. It was occupied by Shell Canada Limited, which was registered as generator of halogenated pesticides through the years of 1986 to 1998.

Due to the presence of the retail fuel outlet adjacent to the subject site, it is expected that this facility be a potential source of soil and ground water impacts at the subject site.

TSSA Records: The TSSA indicated the following information pertaining to the property at 845 Burloak Drive, Oakville, Ontario.

The property was listed as a Petro-Canada self serve gasoline station with a propane cylinder exchange service. The owner was listed as 1491222 Ontario Ltd O/A Petro Canada. Records indicate that the facility has a total liquid fuel capacity of 185,000-L: one 35,000-L double wall fibreglass fuel UST, and three 50,000-L double wall fibreglass fuel UST. All fuel USTs were installed in 2004.

There are inspection records listing minor deficiencies at the fuel dispensing facilities such as “No Smoking/Ignition off” sign missing and the intercom not installed/operating. These issues were resolved by the station operator in August 2005.

The TSSA database has no record of any further outstanding instructions, incident reports, fuel oil spills, or contamination records respecting the above mentioned property. However, the presence of the fuel storage and dispensing facilities at the property represents a potential source of environmental concern to the subject site. A copy of the TSSA report is included in Appendix VI.

3.1.5 GOVERNMENT FILES

MOE File Information: Freedom of Information and Protection of Privacy Act information was requested from the Ministry of the Environment (MOE). A response was received on January 15, 2010. The MOE provided copies of documents regarding applications for approvals required prior to constructing the new Petro Canada retail fuel station. No other files pertaining to the site were found in the MOE files.

Municipal File Information: Municipal file information was requested from the Town of Oakville. The response letter indicated the following:

- A building permit was issued in 2004 permitting a new construction;
- there are no outstanding work orders under the Building Code Act;

- the property is zoned C3A -Arterial Commercial;
- the property is not subject to an outstanding work order under the property By-Law under Section 15.1 of the Building Code Act; and,
- the property is nit designated as a Heritage

Additionally, the Town of Oakville provided a copy of a Certificate of Occupancy under section 4 Oakville Zoning By-law. The certificate indicates that the property may be used as a propane cylinder sales and exchange station. Copies of the response letter and the certificate are included in Appendix VII.

A review of the Town of Oakville official zoning map, which was attached to the response letter, indicated that the site is not within or adjacent to any Environmental Significant Areas (ESAs) or Natural Heritage System.

3.1.6 PREVIOUS REPORTS AND OTHER DOCUMENTATION

Terrapex conducted a Phase II Environmental Site Assessment of the property on December 22, 2009. The Phase II ESA was conducted to assess the extent of any subsurface petroleum hydrocarbon impact in soil and/or groundwater beneath the site. The ESA consisted of drilling of five boreholes and the completion of all boreholes as groundwater monitoring wells. The wells were installed within the L-shaped site to the north, east and south of the existing Petro Canada retail fuel outlet. According to borehole logs from this Phase II ESA, the stratigraphy at the site is comprised of topsoil underlain by silty clay/clayey silt with trace to some organics. Bedrock (Queenston Shale) was usually encountered at depths ranging between 2 m below ground surface (bgs) and 2.3 m bgs. The boreholes were terminated at depths ranging between 5.8 m bgs and 6.1 m bgs. One soil and one groundwater sample from each borehole/monitoring well was submitted to the laboratory for analysis of BTEX and PHC fraction F1-F4. One sample was submitted for grain size analysis.

The results of the laboratory analyses indicated that concentrations of BTEX and PHC fractions F1-F4 in soil and groundwater were generally less than the laboratory detection limit and were all less than the applicable O. Reg. 153/04 Table 2 Site Condition Standards (SCS). The soil present at site was determined to be fine-grained. A copy of the Phase II ESA report is attached in Appendix VIII.

3.2 SITE INSPECTION

3.2.1 SITE DESCRIPTION

General Site Layout: The subject site is L- shaped and consists of vacant space, covered by topsoil. There are no buildings or structures on site.

At the time of the site visit, the locations of the proposed five boreholes/monitoring wells for the Phase II ESA were scanned for underground installations and marked.

The layout of the site is shown on Figure 2. Selected photographs of the site from the site inspection are attached in Appendix IX.

Services: The site is not connected to any utility services.

Residues/Staining: No evidence of residues or staining was observed at the subject site with the exception of localized staining on the pavement at the adjacent Petro Canada retail fuel outlet.

Debris: Some construction debris and household waste items such as cans, bottles and wrappers were discarded or had blown across the site.

Building Description: No building or any other structures were observed during the site inspection.

3.2.2 REGULATED MATERIALS AND DESIGNATED SUBSTANCES

Polychlorinated Biphenyls (PCBs): No electrical equipment, such as transformers suspected to contain PCBs were observed at the site.

Asbestos-Containing Material (ACM): No items suspected of being asbestos containing were noted during the site visit.

Lead: Lead-containing material was not observed during the site inspection.

Mercury: No mercury-containing devises or mercury-based paint were observed during the site visit.

Other Designated Substances: In addition to asbestos, mercury, and lead, designated substances include acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates, silica, and vinyl chloride.

None of these additional designated substances were observed or suspected to be present at the site.

Urea Formaldehyde Foam Insulation (UFFI): No evidence of UFFI, or of UFFI installation was observed during the inspection.

Ozone-Depleting Substances (ODS): No ozone-depleting substances were suspected to be present at the site.

Hazardous Materials: No evidence of hazardous materials were observed during our site inspection.

3.2.3 STORAGE TANKS

There are no storage tanks on site.

3.2.4 ADJACENT PROPERTIES

The site is located in an area of mixed commercial development. Land uses of the surrounding areas at the time of the inspection are listed below.

North:	Vacant Lot, Power Centre beyond;
Northeast:	Vacant Lot, rail tracks and PC refinery beyond;
East:	Rail tracks, vacant lot beyond***;***
Southeast:	Rail tracks, vacant lot beyond;
South:	Burloak Drive, industrial facilities beyond;
Southwest:	Burloak Drive, industrial facilities and Esso retail fuel outlet beyond;
West:	PC retail fuel outlet, intersection Burloak Drive/Wyecroft Road beyond; and,
Northwest:	Commercial plaza (Silver City, Kelsey's)

3.3 INTERVIEWS

Terrapex conducted an interview with Mr. Walter Kowal regarding the subject site. Mr. Kowal was an employee of Petro-Canada for several years and was involved in the management of this site. Mr. Kowal indicated the following:

- the subject site was formerly part of a 20 acre parcel of land situated on the north side of the rail corridor, stretching east from Burloak Drive almost to the Bronte Creek Valley;

- the parcel was purchased by City Service Oil Company in the 1950's as part of the refinery lands which are currently present to the south of the rail corridor (the current Petro-Canada refinery lands);

- the parcel was not developed as part of the refinery facilities but leased to local farmers and cultivated;

- the subject site and current Petro-Canada station lands were severed in 1999-2000 and the remaining lands to the east sold for commercial development of the businesses which are currently there; lands were not farmed after the severance;

- the current Petro-Canada station was constructed in 2004.

- Mr. Kowal was not aware of any environmental issues which may have been associated with the subject lands.

4.0 SUMMARY AND CONCLUSIONS

The site at 845 Burloak Drive in Oakville is located in an area of mixed commercial land use and is presently vacant.

Based on the findings of the Phase I ESA, the presence of the adjacent retail fuel outlet and the nearby refinery represent a potential for petroleum hydrocarbon impacts. However, the recently conducted Phase II ESA did not identify any petroleum hydrocarbon impacts to soil or groundwater exceeding the applicable Ontario Regulation 153/04 Table 2 Site Condition Standards.

No other potential or actual environmental concerns were identified.

It is our opinion that the site currently meets the Ontario Regulation 153/04 Standards for commercial land use in a potable groundwater situation.

5.0 CLOSURE

The environmental assessment described herein was conducted in accordance with the terms of reference for this project, agreed upon by Terrapex Environmental Ltd. and Suncor Energy Products Inc.

This report has been prepared for the sole use of Suncor. Terrapex Environmental Ltd. accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Suncor.

Terrapex Environmental Ltd. has exercised due care, diligence, and judgement in the performance of this Phase I ESA; however, studies of this nature have inherent limitations. This report is intended to provide only a general assessment of the environmental conditions encountered at the site. Terrapex has relied upon the accuracy of information collected during the records review and interviews.

By necessity, the findings and observations regarding actual or potential contamination of the property are based solely on the extent of observations and information gathered during the investigation, and subsequent investigations of differing scope may reveal conflicting results.

Sabine Takev, M.A.Sc.
Project Scientist

Jeff Stevenson, P.Geo.
Senior Project Manager

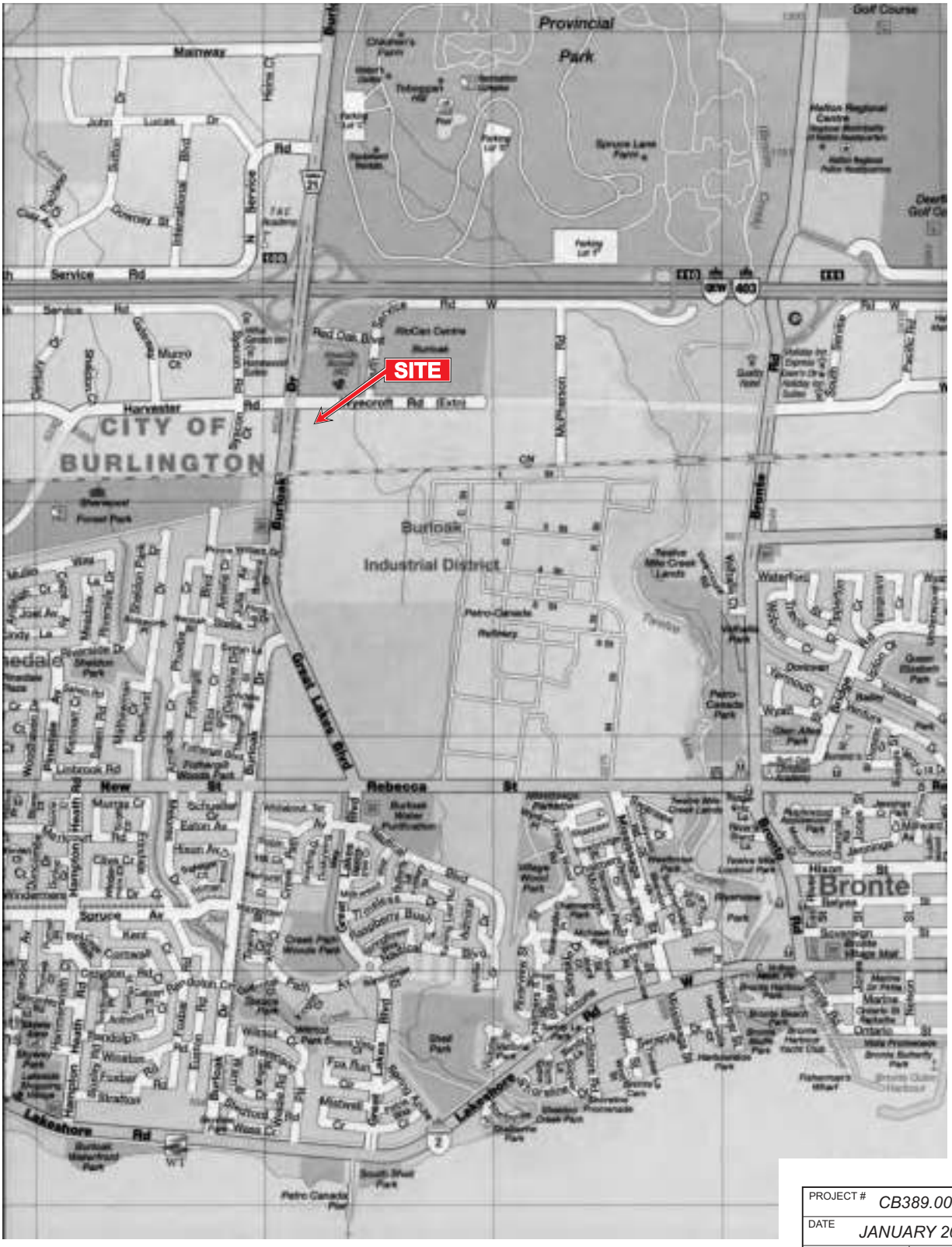
Figures

TERRAPEX
Environmental Ltd.

SITE LOCATION

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.



NOTE: MAP IMAGE TAKEN FROM MAPART
GOLDEN HORSESHOE ATLAS, 2008 EDITION PAGE 476.

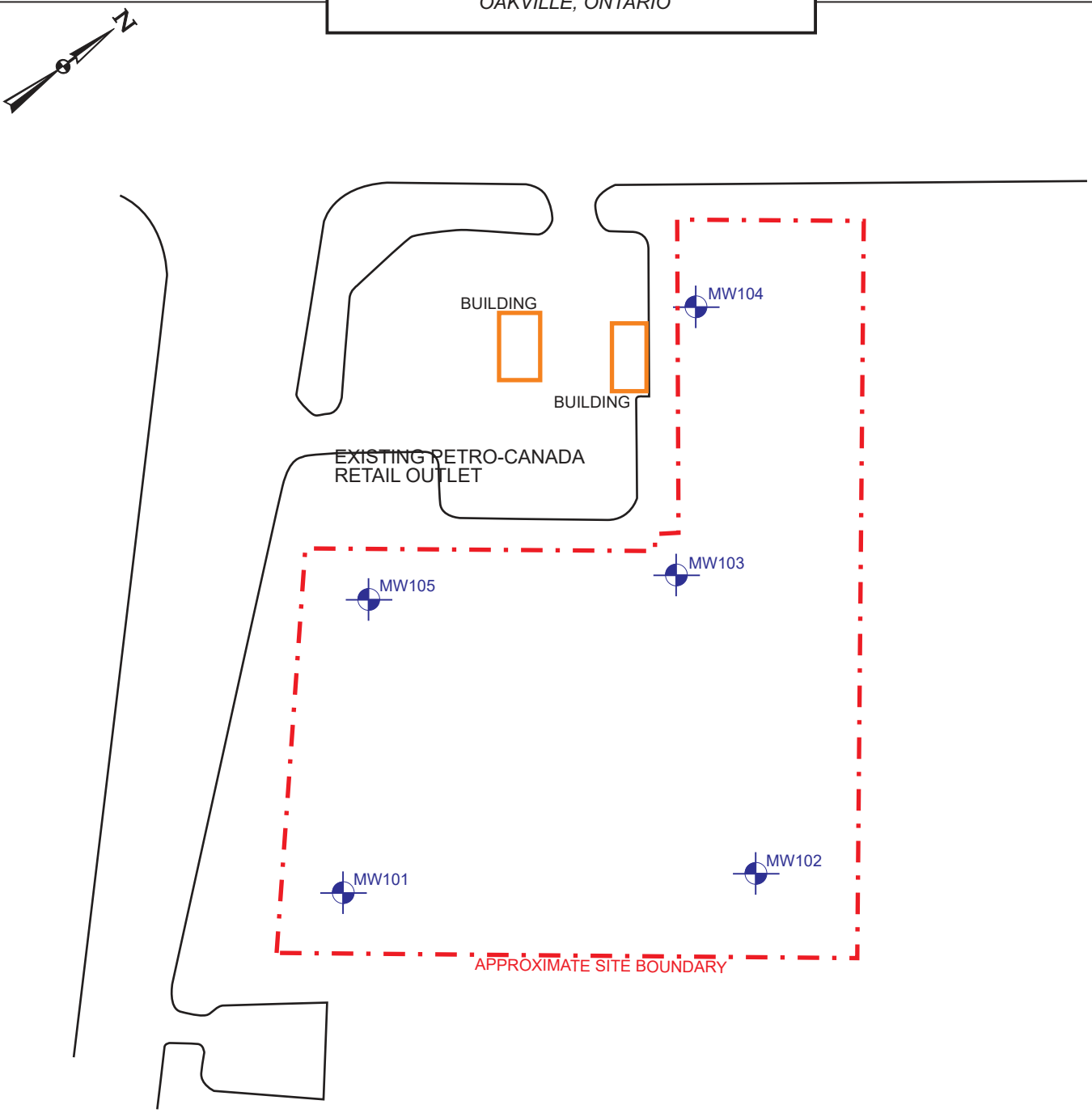
PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 1

TERRAPEX
Environmental Ltd.

GENERAL SITE LAYOUT

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.



0 30m 60m
(APPROXIMATE)

LEGEND

MONITORING WELL

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 2

Appendix I
Aerial Photographs

TERRAPEX
Environmental Ltd.

1960 AERIAL PHOTOGRAPH

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.

PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE AI-1

TERRAPEX
Environmental Ltd.

1974 AERIAL PHOTOGRAPH

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.

NOTE: MAP IMAGE TAKEN FROM MAPART
GOLDEN HORSESHOE ATLAS, 2008 EDITION PAGE 476.

PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE AI-2

TERRAPEX
Environmental Ltd.

1985 AERIAL PHOTOGRAPH

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.

PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE AI-3

TERRAPEX
Environmental Ltd.

2009 SATELLITE IMAGE

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.

PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE AI-4

Appendix II
City Directories

City Directory Information Source
1957-2008: Vernon's Burlington & Hamilton Suburban City Directory 1958-2000: Polk Canada Ltd: Halton/Peel Regions, Ontario Criss Cross Directory

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 2008	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed
5530 Harvester Road (Burlington)	-Vacant
5539 Harvester Road (Burlington)	-Tim Hortons -Esso

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 2003	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed

5530 Harvester Road (Burlington)	-Vacant
5539 Harvester Road (Burlington)	-Address Not Listed

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 2000	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed
5530 Harvester Road (Burlington)	-Vacant
5539 Harvester Road (Burlington)	-Address Not Listed

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 1994	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed
5530 Harvester Road (Burlington)	-Long Manufacturing Ltd aftermarket div

5539 Harvester Road (Burlington)	-Address Not Listed

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 1989	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed
5530 Harvester Road (Burlington)	-Address Not Listed
5539 Harvester Road (Burlington)	-Address Not Listed

PROJECT NUMBER: 20091109021	
Site Address:	845 Burloak Drive, Oakville, Ontario
Year: 1984	
Site Listing:	-Address Not Listed
677 Burloak Drive	-Address Not Listed
3549 Wyecroft Road	-Address Not Listed
3531 Wyecroft Road	-Address Not Listed
5530 Harvester Road (Burlington)	-Address Not Listed

5539 Harvester Road (Burlington)	-Address Not Listed

-All listings for businesses were listed as they are in the city directory.
-Listings that are residential are listed as “residential” with the number of tenants. The name of the residential tenant is not listed in the above city directory

Appendix III
Title Search Information

ECOLOG ERIS
Pinpointing Your Environmental Risks

12 Concorde Place, Suite 800
Toronto, Ontario, M3C 4J2
Phone: (416) 510-5204
Fax: (416) 510-5133
Toll Free: 1-877-512-5204
www.ecologERIS.com

November 18, 2009

Sabine Takev
Terrapex Environmental Ltd
920 Brant Street, Unit 16
Burlington, ON
L7R4J1

Dear Sabine Takev:

Re: Land Title Search

Enclosed is information pertaining to the site "CB289.00", located at 845 Burloak Drive, in Oakville, ON.

The enclosed title information was obtained from the applicable Land Registry Office through access to the electronic Land Titles system. If required, additional historical titles can be obtained through a search of the hardcopy registry books.

For the information enclosed, a charge of $60.00 Cdn will be included on the relevant ERIS invoice.

If you have any questions regarding the enclosed information, please do not hesitate to contact me at the number below.

Sincerely,

Eleanor Goolab
416-510-5204 x11

* CERTIFIED BY LAND REGISTRAR IN ACCORDANCE WITH LAND TITLES ACT * SUBJECT TO RESERVATIONS IN CROWN GRANT *

PROPERTY DESCRIPTION: PT LT 35, CON 3 TRAF SDS, PART 2, 20R12946 SAVE & EXCEPT PTS 1, 20R15627 & PT 1, 20R17292; OAKVILLE. T/W EASE HR601287 OVER PT 1, 20R17292.

PROPERTY REMARKS:

ESTATE/QUALIFIER:
FEE SIMPLE
LT CONVERSION QUALIFIED

RECENTLY:
DIVISION FROM 24858-0142

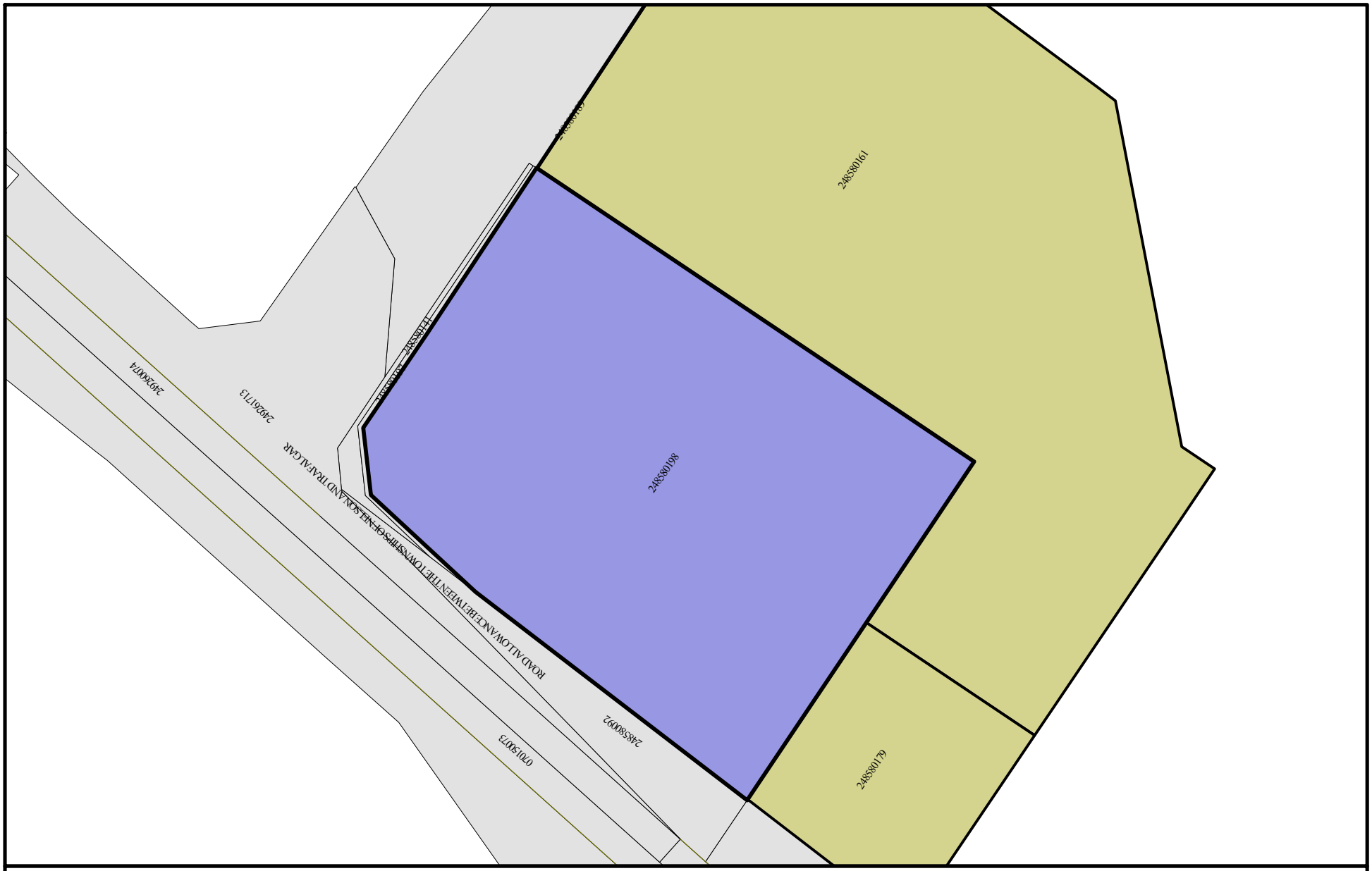
PIN CREATION DATE:
2007/09/26

OWNERS' NAMES
PETRO-CANADA

CAPACITY SHARE

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
** PRINTOUT INCLUDES ALL DOCUMENT TYPES (DELETED INSTRUMENTS NOT INCLUDED) **						
**SUBJECT, ON FIRST REGISTRATION UNDER THE LAND TITLES ACT, TO:						
** SUBSECTION 44(1) OF THE LAND TITLES ACT, EXCEPT PARAGRAPH 11, PARAGRAPH 14, PROVINCIAL SUCCESSION DUTIES *						
** AND ESCHEATS OR FORFEITURE TO THE CROWN.						
** THE RIGHTS OF ANY PERSON WHO WOULD, BUT FOR THE LAND TITLES ACT, BE ENTITLED TO THE LAND OR ANY PART OF						
** IT THROUGH LENGTH OF ADVERSE POSSESSION, PRESCRIPTION, MISDESCRIPTION OR BOUNDARIES SETTLED BY						
** CONVENTION.						
** ANY LEASE TO WHICH THE SUBSECTION 70(2) OF THE REGISTRY ACT APPLIES.						
**DATE OF CONVERSION TO LAND TITLES: 1996/05/27 **						
20R12946	1998/10/08	PLAN REFERENCE				C
HR202219	2003/06/09	TRANSFER	$357,524	1427814 ONTARIO LIMITED	PETRO-CANADA	C
HR278780	2004/04/20	NOTICE		THE CORPORATION OF THE TOWN OF OAKVILLE		C
HR285600	2004/05/14	NOTICE		THE REGIONAL MUNICIPALITY OF HALTON		C

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.



TERANET Teraview

0 17 34 51 68 85 102 metres

N
W E
S

Nov 18, 2009

Teranet Customer Service Centre: 1-800-208-5263 (Toronto: 416-360-1190)

Appendix IV
RMS Documents

HEIRS™

Historical
Environmental
Information
Reporting
System

Site Address:
845 Burloak Dr
Oakville, ON

Project No:
20091109021

Requested by:
E. Goolab
Ecolog ERIS

Date Completed:
November 18, 2009

RISK MANAGEMENT SERVICES
An **SCM** Company

150 Commerce Valley Drive W
Thornhill, ON L3T 7Z3
Tel: (905) 882-6300 ext 5410
www.scm-rms.ca

Report Completed By:
Vanessa Ode

ISO 9001 Certified

Risk Management Services

150 Commerce Valley Drive W
8th Floor
Markham, ON
L3T 7Z3

Tel: (905) 882-6300 x5410
Fax: (905) 695-6543

Historical Environmental Information Reporting System (HEIRS™)

Eleanor Goolab
EcologERIS
12 Concorde Place, Suite 800
Toronto, ON
M3C 4J2

November 18, 2009

Regarding: 845 Burloak Dr, Oakville - 20091109021

As requested, we have searched our records concerning the above site and the following information as listed below is appended hereto:

Information	Date(s)
Fire Insurance Plan(s)	NRF
Property Underwriters' Report(s)	NRF
Property Underwriters' Plan(s)	NRF

NRF: No Records Found NO: Not Ordered

Our invoice in the amount of $40.00 (+ GST) for the information provided will follow in due course.

Thank you for employing our services.

Vanessa Ode
Environmental Services

New Website – www.scm-rms.ca

HEIRS™

Historical
Environmental
Information
Reporting
System

NO RECORDS FOUND

Site Address:
845 Burloak Dr
Oakville, ON

Project No:
20091109021

Appendix V
Ecolog ERIS Report

DATABASE REPORTS

Canada's Primary Environmental Risk Information Service

Project Site:	**CB389.00** **845 Burloak Drive** **Oakville, ON**
Client:	**Sabine Takev** **Terrapex Environmental Ltd** **920 Brant Street, Unit 16** **Burlington, ON L7R4J1**
ERIS Project No:	**20091109021**
Report Type:	**Standard Report – .25km Search Radius**
Prepared By:	**Daniela Nigro** dnigro@eris.ca
Date:	**January 05, 2010**

Table of Contents

Order Number: 20091109021
Site Name: CB389.00
Site Address: 845 Burloak Drive Oakville, ON
Report Type: Standard Report, 0.25 km Search Radius

Report Summary

Order Number: 20091109021
Site Name: CB389.00
Site Address: 845 Burloak Drive Oakville, ON
Report Type: Standard Report, 0.25 km Search Radius

Number of Mappable Records Surrounding the Site

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0	0
AGR	Aggregate Inventory	Y	0	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	5	5
AUWR	Automobile Wrecking & Supplies	Y	0	0	1	1
BORE	Borehole	N	0	0	0	0
CA	Certificates of Approval	Y	0	0	93	93
CFOT	Commercial Fuel Oil Tanks	Y	0	0	1	1
CHEM	Chemical Register	Y	0	0	5	5
COAL	Coal Gasification Plants	Y	0	0	0	0
CONV	Compliance and Convictions	Y	0	0	1	1
DRL	Drill Hole Database	Y	0	0	0	0
EBR	Environmental Registry	Y	0	0	79	79
EEM	Environmental Effects Monitoring	Y	0	0	0	0
EHS	ERIS Historical Searches	Y	0	1	74	75
EIIS	Environmental Issues Information System	Y	0	0	0	0
FCON	Federal Convictions	Y	0	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	Y	0	0	0	0
FST	Fuel Storage Tank	Y	2	3	10	13
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	6	426	432
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0	0
MNR	Mineral Occurrences	Y	0	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	3	3
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	Y	0	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	1	1
NPCB	National PCB Inventory	Y	0	0	6	6
NPRI	National Pollutant Release Inventory	Y	0	0	100	100
OGW	Oil and Gas Wells	Y	0	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	8	8
PAP	Canadian Pulp and Paper	Y	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0	0
PES	Pesticide Register	Y	0	0	2	2
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	7	7
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	8	8
RSC	Record of Site Condition	Y	0	0	4	4
RST	Retail Fuel Storage Tanks	Y	0	1	3	4

Report Summary

Order Number: 20091109021
Site Name: CB389.00
Site Address: 845 Burloak Drive Oakville, ON
Report Type: Standard Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
SCT	Scott's Manufacturing Directory	Y	0	3	316	319
SPL	Ontario Spills	Y	0	0	172	172
SRDS	Wastewater Discharger Registration Database	Y	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	3	3
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	5	5
WWIS	Water Well Information System	Y	0	0	45	45
		TOTAL	2	14	1,378	1,392

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.

SITE DIAGRAM

ECOLOG ERIS
Pinpointing Your Environmental Risks
12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: CB389.00
845 Burloak Drive
Oakville, ON

ERIS Project #: 20091109021

Date: NOV-18-2009

LEGEND

- Project Property
- Database Location

Points of Interest
- Chimney
- Silo

Pipe & Transmission Lines
- Pipeline
- Transmission Line
- Transmission Tower
- Transformer Station

Rail
- Railway - Main
- Railway - Sidetrack
- Railway - Abandoned
- Bridge
- Tunnel

Transportation - Other
- Embankment
- Trail
- Runway

Hydrographic Features
- Permanent Waterway
- Intermittent Waterway
- Open Reservoir
- Dyke/Levee
- Dam
- Breakwall
- Wetland

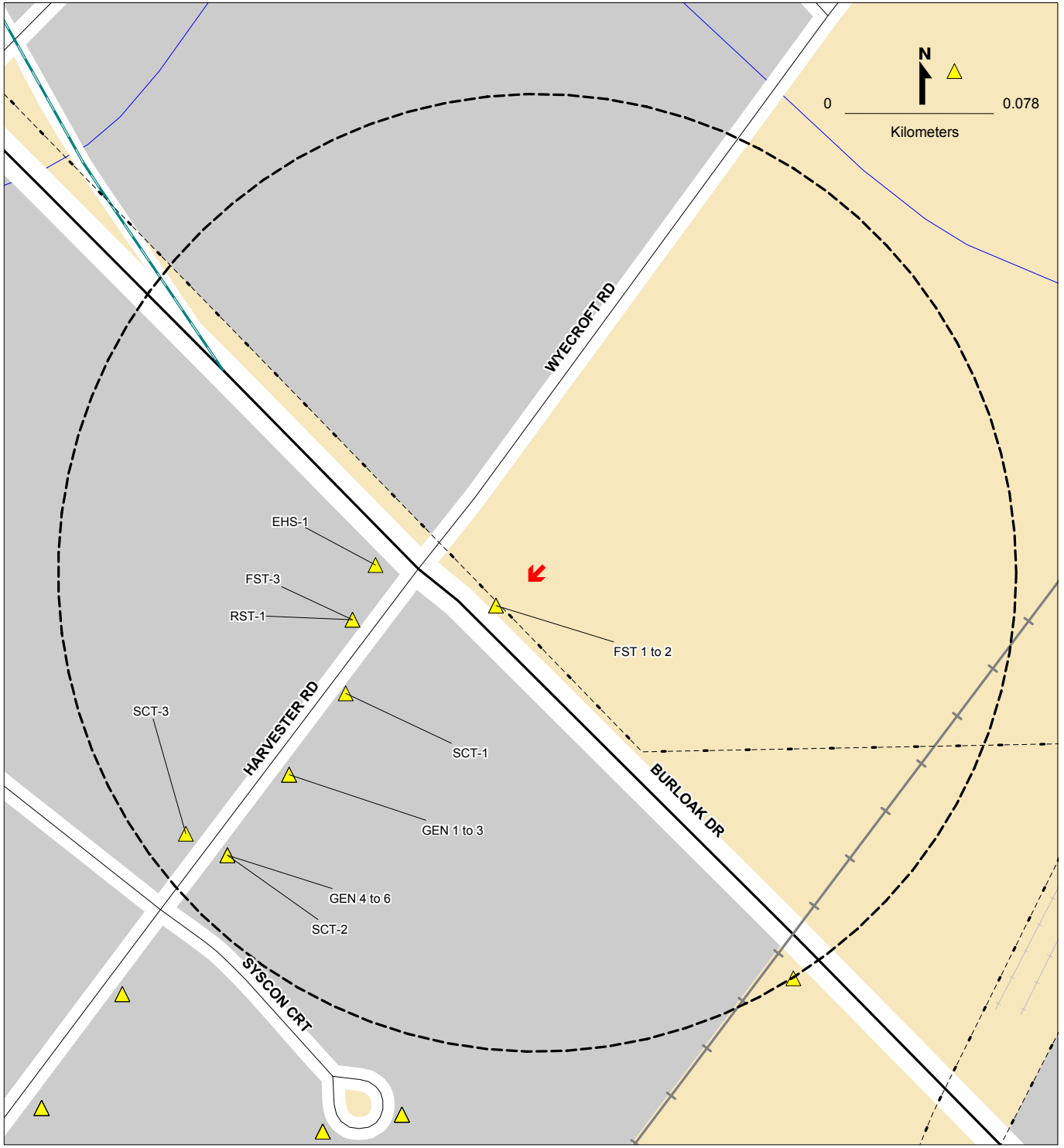
Landuse Classifications
- Open Area
- Residential
- Commercial
- Resource and Industrial
- Government and Institutional
- Parks and Recreational
- Waterbody

Recreation
- Golf Course/Driving Range
- Park/Sports Field
- Other Recreation Area
- Sports/Race Track
- Cemetery
- Campground

Vegetation
- Wooded Area
- Orchard
- Vineyard

Industrial Resources
- Conveyor
- Crane: Moveable
- Crane: Stationary
- Tank
- Rock Cut
- Auto Wrecker
- Lumber Yard
- Pit

This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.



Section ii

Site Report

Order Number: 20091109021
Site Name: CB389.00
Site Address: 845 Burloak Drive Oakville, ON
Report Type: Standard Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Fuel Storage Tank

Map Key	Company Name	Address	City	Postal Code
FST-1	1491222 ONTARIO LTD O/A PETRO CANADA	845 BURLOAK @ SOUTH SERVICE RD	OAKVILLE	L6L 6V9
FST-2	2116160 ONTARIO INC O/A GAS STN	845 BURLOAK @ SOUTH SERVICE RD	OAKVILLE	

Detail Report

Order Number: 20091109021
Site Name: CB389.00
Site Address: 845 Burloak Drive Oakville ON
Report Type: Standard Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

ERIS Historical Searches

Fuel Storage Tank

Ontario Regulation 347 Waste Generators Summary

Retail Fuel Storage Tanks

Scott's Manufacturing Directory

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-1		NW Corner of Burlock Dr and Harvester Rd Burlington	20010913001 **Addit. Info Ordered:**	9/21/01	Complete Report	0.25

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-1	1491222 ONTARIO LTD O/A PETRO CANADA	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE L6L 6V9	3/3/2008 3:34:00 PM	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Self Serve

Status	Capacity (L)	Year of Installation	Tank Fuel Type
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline
Active	35000	2004	Liquid Fuel Double Wall UST - Diesel
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-2	2116160 ONTARIO INC O/A GAS STN	845 BURLOAK @ SOUTH SERVICE RD OAKVILLE	3/23/2007	Licensed	August 2007	Retail Fuel Outlet	Gasoline Station - Self Serve

Status	Capacity (L)	Year of Installation	Tank Fuel Type
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline
Active	35000	2004	Liquid Fuel Double Wall UST - Diesel
Active	50000	2004	Liquid Fuel Double Wall UST - Gasoline

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-3	2074065 ONTARIO INC O/A GAS STN	5539 HARVESTER RD BURLINGTON L7L 7G4	4/3/2008 10:47:00 AM	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Self Serve

Status	Capacity (L)	Year of Installation	Tank Fuel Type
Active	46400	2002	Liquid Fuel Double Wall UST - Gasoline
Active	46400	2002	Liquid Fuel Double Wall UST - Gasoline
Active	46400	2002	Liquid Fuel Double Wall UST - Gasoline

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-1	FISHER SERVICE COMPANY 15-337	5510 HARVESTER ROAD BURLINGTON L7L 5V4	3911	INDICAT., ETC. INST.	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0204901	146	OTHER SPECIFIED INORGANICS
			Approval Yrs:	92,93,94,95,96,97	212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS
					113	ACID WASTE - OTHER METALS
GEN-2	FISHER SERVICE COMPANY	5510 HARVESTER ROAD BURLINGTON L7L 5V4	3911	INDICAT., ETC. INST.	113	ACID WASTE - OTHER METALS
			Generator #:	ON0204901	145	PAINT/PIGMENT/COATING RESIDUES
			Approval Yrs:	98	146	OTHER SPECIFIED INORGANICS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS
GEN-3	FISHER SERV(OUT OF BUSINESS)	5510 HARVESTER ROAD BURLINGTON L7L 5V4	3911	INDICAT., ETC. INST.	113	ACID WASTE - OTHER METALS
			Generator #:	ON0204901	145	PAINT/PIGMENT/COATING RESIDUES
			Approval Yrs:	99,00	146	OTHER SPECIFIED INORGANICS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-4	FAB INDUSTRIES INC.	5490 HARVESTER ROAD BURLINGTON L7L 5V4	6351	GARAGES(GEN. REPAIR)	252	WASTE OILS & LUBRICANTS
			Generator #:	ON2300900		
			Approval Yrs:	97,98,99,00,01		
GEN-5	Navona Realty Services Inc.	5490 Harvester Road Burlington L7L 5V4	531111	Lessors of Residential Buildings and Dwellings (ex	213	PETROLEUM DISTILLATES
					252	WASTE OILS & LUBRICANTS
			Generator #:	ON5205237		
			Approval Yrs:	06		
GEN-6	Precision Metal Cutting Inc.	5490 Harvester Road Burlington L7L 5V4	332710	Machine Shops	253	EMULSIFIED OILS
			Generator #:	ON5652938		
			Approval Yrs:	04,05		
n/a	SHELL CANADA LTD.	PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7 OAKVILLE	3611	REFINED PETRO. PROD.	242	HALOGENATED PESTICIDES
			Generator #:	ON0005132		
			Approval Yrs:	86,87,88,89,90		
n/a	SHELL CANADA LTD. 34-281	PT. LOT 35, CONC.3, TOWN OF OAKVILLE C/OP.O.BOX 100,STN.M,CLGY,ALTA L6J5C7 OAKVILLE	3611	REFINED PETRO. PROD.	242	HALOGENATED PESTICIDES
			Generator #:	ON0005132		
			Approval Yrs:	92,93,94,95,96,97		
n/a	SHELL CANADA LIMITED	PT. LOT 35, CONC.3 SDS DRAWING 467-79-3 TOWN OF OAKVILLE	3611	REFINED PETRO. PROD.	242	HALOGENATED PESTICIDES
			Generator #:	ON0005132		
			Approval Yrs:	98		

Retail Fuel Storage Tanks

Map Key	Company	Address	Facility	Description
RST-1	BURLOAK HARVESTER ESSO	5539 HARVESTER RD BURLINGTON L7L 7G4	Service Stations-Gasoline, Oil & Natural Gas	

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft²)	Employment	SIC/NAICS Code	Description
SCT-1	LONG MANUFACTURING LTD.	5530 HARVESTER RD BURLINGTON L7L 5V4	1885	28000	28	3443	FABRICATED PLATE WORK (BOILER SHOPS)
						3714	MOTOR VEHICLE PARTS AND ACCESSORIES
						332410	Power Boiler and Heat Exchanger Manufacturing
						336110	Automobile and Light-Duty Motor Vehicle Manufacturing
SCT-2	Precision Metal Cutting	5490 Harvester Rd Burlington L7L 5V4	2004	12000	10	331222	Steel Wire Drawing
						332999	All Other Miscellaneous Fabricated Metal Product Manufacturing
SCT-3	Aero-Kit Industries Inc.	5499 Harvester Rd Burlington L7L 5V4	6/1/1978	20000		336360	Motor Vehicle Seating and Interior Trim Manufacturing
						326198	All Other Plastic Product Manufacturing
						314910	Textile Bag and Canvas Mills
						415290	Other New Motor Vehicle Parts and Accessories Wholesaler-Distributors

Appendix: Ontario Database Descriptions

EcoLog Environmental Risk Information Services Ltd can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to EcoLog ERIS at the time of update. **Note:** Databases denoted with "*" indicates that the database will no longer be updated. See the individual database descriptions for more information.

Provincial Government Source Databases:

Abandoned Aggregate Inventory **Up to Sept 2002** **AAGR**

The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.

Aggregate Inventory **Up to Mar 2008** **AGR**

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The databases provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mines Information System **1800-2005** **AMIS**

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Ontario Borehole **1875-Jul 2009** **BORE**

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc.
For all water well data or oil and gas well data for Ontario please refer to WWIS and OGW.

Certificates of Approval **1985-Sept 2002* (for current CofA info please check the EBR Database)** **CA**

This database contains the following types of approvals: Certificates of Approval (Air) issued under Section 9 of the Ontario EPA; Certificates of Approval (Industrial Wastewater) issued under Section 53 of the Ontario Water Resources Act ("OWRA"); and Certificates of Approval (Municipal/Provincial Sewage and Waterworks) issued under Sections 52 and 53 of the OWRA. For more current Certificate of Approval information please see the EBR database, which will include information such as 'Approval for discharge into the natural environment other than water (i.e. Air) (EPA s.9)', and Approval for sewage works (OWRA s.53(1)).

TSSA Commercial Fuel Oil Tanks **1948-2009** **CFOT**

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Coal Gasification Plants **1987, 1988*** **COAL**

This inventory of all known and historical coal gasification plants was collected by the Ministry of Environment. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, landuse, soil condition, site operators/occupants, site description, and potential environmental impacts. This information is effective to 1988, but the program has since been discontinued.

Compliance and Convictions **1989-Oct 2009** **CONV**

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Drill Holes **1886-2005** **DRL**

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Environmental Registry **1994-Oct 2009** **EBR**

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, licence, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes things like; Approval for discharge into the natural environment other than water (i.e. Air), Permit to Take Water (PTTW), Certificate of Property Use (CPU), Approval for a waste disposal site, Order for preventative measures.(EPA s. 18), Order for conformity with Act for waste disposal sites.(EPA s. 44), Order for remedial work.(EPA s. 17) and many more.

TSSA Fuel Storage Tanks **Current to Dec 2008** **FST**

The Technical Standards & Safety Authority (TSSA), under the *Technical Standards & Safety Act* of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Ontario Regulation 347 Waste Generators Summary **1986-Jun 2009** **GEN**

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use…" followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Mineral Occurrences **1846-Sept 2008** **MNR**

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Non-Compliance Reports **1992(water only), 1994-2007** **NCPL**

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Ontario Oil and Gas Wells **1800-Aug 2009** **OOGW**

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. Information available for all wells in the ERIS database include well owner/operator, location, permit start date, well cap date, licence number, status, depth and the primary target (rock unit) of the well being drilled.

Ontario Inventory of PCB Storage Sites **1987-Oct 2004** **OPCB**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Pesticide Register **1988-Nov 2008** **PES**

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

Private and Retail Fuel Storage Tanks **1989-1996*** **PRT**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Ontario Regulation 347 Waste Receivers Summary **1986-2005** **REC**

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition **1997-Sept 2001, Oct 2004-Oct 2009** **RSC**

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use, such as residential, proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up. Information available includes Registration Number, Filing Owner, Property Address, Filing Date and Municipality.

Ontario Spills **1988-2008** **SPL**

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Wastewater Discharger Registration Database **1990-2008** **SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Waste Disposal Sites - MOE CA Inventory **1970-Sept 2002** **WDS**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. For more current information for Waste Disposal Sites please see the EBR database, which will include information such as 'Approval for a waste disposal site (EPA s.27)' and 'Approval for use of a former waste disposal site (EPA s.46)'.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory **Up to Oct 1990*** **WDSH**

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Water Well Information System **1955-May 2009** **WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. Geographic coordinates are reliable according to the given percentage. Wells that are identified with lot and concession only are now also included in the database and is no longer provided as a separate report.

Federal Government Source Databases: Diagram Identifier:

Environmental Effects Monitoring **1992-2007*** **EEM**

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Environmental Issues Inventory System **1992-2001*** **EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Federal Convictions **1988-Jun 2007** **FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Contaminated Sites on Federal Land **June 2000-Sept 2009** **FCS**

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

Fisheries & Oceans Fuel Tanks **1964-Sept 2003** **FOFT**

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Indian & Northern Affairs Fuel Tanks **1950-Aug 2003** **IAFT**

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

National Analysis of Trends in Emergencies System (NATES) **1974-1994*** **NATE**

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

National Defence & Canadian Forces Fuel Tanks **Up to May 2001*** **NDFT**

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

National Defence & Canadian Forces Spills **Mar 1999-Jul 2009** **NDSP**

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

National Defence & Canadian Forces Waste Disposal Sites **2001-April 2007** **NDWD**

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

National Environmental Emergencies System (NEES) 1974-2003 **NEES**

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets – or Trends – which dates from approximately 1974 to present. **NEES Trends** is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

National PCB Inventory 1988-June 2004 **NPCB**

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

National Pollutant Release Inventory 1993-2007 **NPRI**

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers of 178 specified substances.

Parks Canada Fuel Storage Tanks 1920-Jan 2005 **PCFT**

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Transport Canada Fuel Storage Tanks 1970-March 2007 **TCFT**

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. This inventory will also include The Pickering Lands, which refers to the 7,530 hectares (18,600 acres) of land in Pickering, Markham and Uxbridge - owned by the Government of Canada since 1972. Properties on this land has been leased by the government since 1975, falls under the Site Management Policy of Transport Canada, but administered by Public Works and Government Services Canada. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Private Source Databases:

Anderson's Waste Disposal Sites 1860s-Present **ANDR**

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the *Ontario MOE Waste Disposal Site Inventory*, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. *Please note that the data is not warranted to be complete, exhaustive or authoritive. The information was collected for research purposes only.*

Automobile Wrecking & Supplies **2001-Feb 2009** **AUWR**

This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Chemical Register **1992, 1999-Feb 2009** **CHEM**

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

ERIS Historical Searches **1999-Oct 2009** **EHS**

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Canadian Mine Locations **1998-2009** **MINE**

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Oil and Gas Wells **Oct 2001-Sept 2009** **OGW**

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Canadian Pulp and Paper **1999, 2002, 2004, 2005, 2009** **PAP**

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Retail Fuel Storage Tanks **2000-Feb 2009** **RST**

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks. Information is provided on company name, location and type of business.

Scott's Manufacturing Directory **1992-Sept 2009** **SCT**

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

Anderson's Storage Tanks **1915-1953*** **TANK**

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. *Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.*

Appendix VI
TSSA Correspondence

14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

Administration and Customer Services

Tel: (416) 734-3402
Fax: (416) 231-1626

10 November 2009
File No: FS 30786

Sabine Takev
TERRAPEX ENVIRONMENTAL LTD.
920 Brant Street
Unit 16
BURLINGTON ON L7R 4J1

Dear Sir or Madam:

RE: 845 Burloak Drive, Oakville, Ontario – Your Project No: CB389.00

This is with reference to your request and fee of $50.00 + GST, for information on the above location.

Enclosed are computerised screen prints showing a licensed self serve gas station and a licensed propane cylinder exchange centre along with equipment details showing underground fuel storage tank details. Copies of the inspection reports are also enclosed.

After a search of our files, TSSA has no record of any further outstanding instructions, incident reports, fuel oil spills, or contamination records respecting the above-mentioned property.

This is all the information the Fuels Safety Division has at this time regarding the above address.

It should be noted that the Fuels Safety Division did not register private fuel underground/aboveground storage tanks prior to January of 1990 or furnace oil tanks prior to May 1, 2002. Also note that the Fuels Safety Division does not register waste oil tanks in apartments, office buildings, residences etc. or ABOVEGROUND gas or diesel tanks.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Yours truly,

Prem Lal
Coordinator Public Information Services

Job 028114890 1000 (000076647763)

Job Description: SELF SERVE - 1491222 ONTARIO LTD O/A PETRO CANADA

Job Type: New License/Modification Job | Date Created: Jan 31, 2008
Status: Licensed | Created By: TIPA/PAPA
Issue Date: Jan 06, 2009 | Date Completed: Feb 29, 2008
Parent Job: 028114890-005 SELF SERVE - 2' 1616O ONTARIO INC O/A GAS STN
Specific Location:

Details | Processes | Warnings | Client | AppEquip | Tank Vehicle | Facility/Location | Periodic Insp

Facility Type: Gasoline Station - Self Serve | Private Fuel Outlet:
Date Received by LRC: Jan 23, 2008 | Rush: | FS Facility Type 2: (None)

Applicant: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON,

Owner: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Contact: Emad Mehrroud

Fuel Supplier: FSD: PETRO CANADA PRODUCTS LTD
584 OXFORD ST W, LONDON, ON, CA
N6H 1T9 -

License Holder: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Bill To: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Bill Renewal To: FSD: 1491222 ONTARIO LTD O/A PETRO CA
845 BURLOAK DR, OAKVILLE, ON, CA

Total Waiting Time: 1 | Hazard Rank:
Total Propane Capacity(Jobs): 0 | Facility: 0
Total Liquid Fuel Capacity(Jobs): 185000 | Facility: 185000
Total Propane Capacity (USWG):
Total Liquid Fuel Capacity: 185000

Reviewed by P.Eng | Date of P.Eng. Letter: mm dd yyyy

Job 028414690-005 (UI#007664763)

Job Description: SELF SERVE - 1491222 ONTARIO LTD O/A PETRO CANADA

Job Type:	New License/Modification Job	Date Created:	Jan 31, 2008
Status:	Licensed	Created By:	THAMPAPA
Issue Date:	Jan 06, 2009	Date Completion:	Feb 29, 2008
Parent Job:	028414690-005 SELF SERVE - 2116160 ONTARIO INC O/A GAS STN		
Specific Location:			

Details | Processes | Warnings | Client | App/Group | Tank/Vehicle | Facility/Location | Periodic Insp

Engineer Contact: David Joyce

Location:
845 BURLOAK @ SOUTH SERVICE RD
OAKVILLE, ON
CA L6M 4J7

Address for New Location:
845 BURLOAK @ SOUTH SERVICE RD
OAKVILLE, ON
CA L6M 4J7

License Expiry Date: Feb 12, 2010 Next Renewal Date: Dec 18, 2009

Comments:

Overpayment Total: 0 Project: subtract Unposted: 0

FS Liquid Fuel Tank

Diesel
Liquid Fue Double Wall UST, Fiberglass (FRP); Capacity (L): 45200; Status:Active

Tech Specs | Jobs | Component | Alt. Fuel | Location | Notes | Warnings | Risk Factor

Fuel Type: Diesel
Capacity (L): 45200
Tank Material: Fiberglass (FRP)
Tank Type: Liquid Fuel Double Wall UST
Equipment Status: Active Status Date: Jun 25, 2009
FS Corrosion Protection: Fiberglass
Installation Year: 2004
ULC Standard:
Number of Other Fuels: 0 Dual Fuel Reg:
Alternate Fuels: Alternate Fuels 2:
Description: 2U0VDS

Liquid Fuel Tank

Gasoline
Liquid Fuel Double Wall UST; Fiberglass (FRP); Capacity (L): 53000; Status: Active

Tech Specs | Jobs | Component | Alt. Fuel | Location | Notes | Warnings | Risk Factor

Fuel Type: Gasoline
Capacity (L): 53000
Tank Material: Fiberglass (FRP)
Tank Type: Liquid Fuel Double Wall UST
Equipment Status: Active **Status Date:** Jun 20, 2009
FS Corrosion Protection: Fiberglass
Installation Year: 2004
ULC Standard:
Number of Other Fuels: 0 Dual Fuel Flag:
Alternate Fuels: Alternate Fuels 2:
Description: 2009VBS

Gasoline
Liquid Fuel Double Wall UST; Fiberglass (FRP) Capacity (L): 50000, Status Active

Tech Specs | Jobs | Component | Alt. Fuel | Location | Notes | Warnings | Risk Factor

Fuel Type: Gasoline
Capacity (L): 50000
Tank Material: Fiberglass (FRP)
Tank Type: Liquid Fuel Double Wall UST
Equipment Status: Active **Status Date:** Jun 25, 2009
ITS Corrosion Protection: Fiberglass
Installation Year: 2004
ULC Standard:
Number of Other Fuels: 0 Dual Fuel Flag:
Alternate Fuels: Alternate Fuels 2:
Description: 2009VBS

FS Liquid Fuel Tank

Gasoline
Liquid Fuel Double Wall UST; Fiberglass (FRP); Capacity (L): 50000 Status:Active

Tech Specs | Jobs | Component | All. Fuel | Location | Notes | Warnings | Risk Factor

Fuel Type: Gasoline
Capacity (L): 50000
Tank Material: Fiberglass (FRP)
Tank Type: Liquid Fuel Double Wall UST
Equipment Status: Active **Status Date:** Jun 25, 2009
FS Corrosion Protection: Fiberglass
Installation Year: 2004
ULC Standard:
Number of Other Fuels: 0 Dual Fuel Flag:
Alternate Fuels: Alternate Fuels 2:
Description: 2009VES

Perform Pre License/Modification Inspection (FS) for Job 02841/1898-008 (0800/764/

Description:

Assignments

Status: Complete by DANEKD

Assigned To: Debbie Danek

Outcome: Minor Def Vo' Comply /Issue Temp License

Schedule

Scheduled Start: Jan 31, 2008

Scheduled Complete: mmm dd, yyyy

Actual Start: mmm dd, yyyy hh:nn

Actual Complete: Feb 13, 2008 13:38

Reports

Details | Deficiencies | Facility/Location | Time | Documents | Comments | O/S Orders | Issue/Void/Orders

Show Resolved?

Description	Found By	Date	Resolved By	Date
Signs	This Process	Feb 13, 2008	Record Voluntary Compliance	Mar 12, 2008

TECHNICAL STANDARDS and SAFETY AUTHORITY

www.tssa.org

14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario M8X 2X4
Ph - (416) 734-3300, Fax - (416) 231-1626
Toll - 1-877-682-8772

Fuel Safety Inspection Report

Technical Standards and Safety Act, 2000

1 *Report Number:* FS-2008-0002087
2 *File Number:* 000076647763

3 Location Address	4 License/Serial Number	5 Job Type	6 Inspection Date
845 BURLOAK @ SOUTH SERVICE RD OAKVILLE, ONTARIO L6M 4J7 CA	000076647763	New License/Modification Job (FS)	Feb 13, 2008
	7 Facility Type: Gasoline Station - Self Serve		

8 Client	
1491222 ONTARIO LTD O/A PETRO CANADA 845 BURLOAK DR OAKVILLE, ONTARIO L6M 4J7 CA	**The Facility/Equipment is inspected in accordance with Ontario's Technical Standards & Safety Act and the appropriate regulations and codes. When an Inspector's order is issued, time limits for compliance reflect the severity of the violation and serve to avoid disruption of service. In the interim period the recipient must ensure that additional precautions are taken for safe use.**

9 Order No.	10 Code Section	11 Order Issued To Emad Mahmoud - Operator	12 Compliance Date
1	LFHC 2007 6.2.1	Signs - At every dispensing facility there shall be installed signage that is visible to all persons as they approach the dispensing location. The signage shall (a) be not less than 20 cm x 28 cm in size; and (b) display (i) "NO SMOKING - TURN IGNITION OFF" in black letters at least 25 mm in height on a yellow background; or (ii) the international no smoking and ignition off symbols in red and black at least 10 cm in diameter on a white background. **Return sign to upright position and secure/fasten to post**	Feb 29, 2008

INSPECTION NOTE: PRE-LICENCE INSPECTION ON SELF SERVE STATION - ORDER ISSUED, ONCE COMPLETED SIGN THE BOTTOM OF THIS DOCUMENT AND FAX TO THE NUMBER BELOW. ANY INQUIRIES CALL 905-331-9917

* Note: This report is eligible for the Voluntary Compliance option.

1. All Inspectors orders appearing on the inspection report must be complied with.
2. The recipient must complete the Voluntary Compliance Option box. After complying with the above conditions, this inspection report must be returned directly to TSSA head office via fax or mail, by the last compliance date appearing on the inspection report.
3. Should TSSA fail to receive the Voluntary Compliance Form by the compliance date, an inspector will re-inspect and bill at double our normal rate.

For more information please contact TSSA at the number above or toll-free at 1-877-682-8772.
It is an offence to knowingly make a false statement or to furnish false information under the Act, the Regulations or a Ministers order. (Technical Standards and Safety Act, 2000; Sect 37)

Inspection Activity - Time Allocation Detail

Date	Activity	Hours	Rate	Comments
Feb 13, 2008	Inspection-Billable	1.50	Straight	
Feb 13, 2008	Travel-Billable	0.50	Straight	

13 Total Time	14 Travel Time	15 Billable Hours	16 Additional Charges
2	0.5	2	

Voluntary Compliance Option* - Eligible? [X] Yes [ ] No *Please refer to guidelines

I hereby confirm that all the Inspector's orders, appearing on this inspection report have been completed.

Print Name Emad Mahmoud - Operator *Client Signature* _____

Debbie Danek — *Inspector*

(905) 331-9921 — *Inspector Fax Number*

As a not-for-profit regulatory authority, TSSA operates on a cost recovery basis. An invoice will be issued for this activity.

Putting Public Safety First

(Note: This is not an invoice)

4* Perform Pre-License/Modification Inspection (PS) for Job 02841480[illegible]

Description: PLS REFER TO PS INS 2007-03607 NY

Assignments

Status: Complete by DANERD

Assigned To: Debbie Denek

Outcome: Inspection Complete & Issue Temp License

Schedule

Scheduled Start: Feb 02, 2007

Scheduled Complete: mmm dd, yyyy

Actual Start: mmm dd, yyyy hh:mm

Actual Complete: Feb 15, 2007 12:20

Reports

Details | Deficiencies | Facility Location | Time | Documents | Comments | OIS Orders | Resolved Orders

Inspection Report Number: PS-2007-000212B

First Inspection

Verify Information:

Orders Issued To:

Date of Inspection: Jan 15, 2007

Re-Inspection Date: mmm dd, yyyy

Have you entered your time: Yes No

Inspection Display Address: 845 BURLOAK @ SOUTH SERVICE RD, OAKVILLE, ON, CA L6M 4J7

TECHNICAL STANDARDS and SAFETY AUTHORITY

www.tssa.org

14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario M8X 2X4
Ph - (416) 734-3300, Fax - (416) 231-1020
Toll - 1-877-682-8772

Fuel Safety Inspection Report

1 *Report Number:* FS-2007-0002129

2 *File Number:* 000078645640

Technical Standards and Safety Act, 2000

3 Facility Address	4 Facility/Serial Number	5 Job Type	6 Inspection Date
845 BURLOAK @ SOUTH SERVICE RD OAKVILLE, ON L6M 4J7 CA	000078645640	New License/Modification Job (FS)	Jan 16, 2007
	7 Facility Type: Gasoline Station - Self Serve		

8 Client
2116180 ONTARIO INC O/A GAS STN
845 BURLOAK DR
OAKVILLE, ON L6M 4J7
CA

The Facility/Equipment is inspected in accordance with Ontario's Technical Standards & Safety Act and the appropriate regulations and codes. When an inspector's order is issued, time limits for compliance reflect the severity of the violation and serve to avoid disruption of service. In the interim period the recipient must ensure that additional precautions are taken for safe use.

INSPECTION NOTE: PRE LICENCE INSPECTION ON SELF SERVE STATION - NO INSTRUCTIONS ISSUED - OK TO LICENCE

11 Total Time	12 Travel Time	13 Number Days	14 Additional Charges
0	0	0	

Voluntary Compliance Option* - Eligible? Yes X No *Please see explanation

I hereby confirm that all the inspector's orders, appearing on this inspection report have been complied.

Print Name _____ *Client Signature* _____

Debbie Danek — (905) 331-9921

Inspector — *Inspector Fax Number*

*As a not-for profit regulatory authority, TSSA operates on a cost recovery basis. An invoice will be issued for this activity

Putting Public Safety First

(Note: This is not an Invoice)

Perform Pre-License/Modification Inspection (FS) for Job 02811489[illegible]

Description: PETRO CANADA SELF SERVE

Assignments

Status: Complete by DANEKD

Assigned To: Debbie Danek

Outcome: Minor Def Vol Comply Issue Temp License

Schedule

Scheduled Start: Jan 28, 2005

Scheduled Complete: mmm dd, yyyy

Actual Start: mmm dd, yyyy hh:mm

Actual Complete: Feb 10, 2005 14:29

Reports

Details | Deficiencies | Facility/Location | Time | Documents | Comments | O/S Orders | Resolved Orders

Show Resolved?

Description	Found By	Date	Resolved By	Date
Incom not installed/operating	This Process	Feb 10, 2005	Record Voluntary Complian	Aug 04, 2005
No Smoking/Ignition Off signs miss	This Process	Feb 10, 2005	Record Voluntary Complian	Aug 04, 2005

TECHNICAL STANDARDS and SAFETY AUTHORITY

www.tssa.org

14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario M8X 2X4
Ph - (416) 734-3300, Fax - (416) 231-1626
Toll - 1-877-682-8772

Fuel Safety Inspection Report

Technical Standards and Safety Act, 2000

1 Report Number: **FS-2005-0001791**
2 File Number: **000076641427**

3 Location Address	4 License/Serial Number	5 Job Type	6 Inspection Date
845 BURLOAK @ SOUTH SERVICE RD OAKVILLE, ONTARIO L6M 4J7 CA	000076641427	New License/Modification Job (FS)	Feb 10, 2005
	7 Facility Type: Gasoline Station - Self Serve		

8 Client	
BHATIA PETROLIUM INC O/A 1535604 ONTARIO INC 845 BUROAK DR OAKVILLE, ONTARIO L6H 4J7 CA	**The Facility/Equipment is inspected in accordance with Ontario's Technical Standards & Safety Act and the appropriate regulations and codes. When an Inspector's order is issued, time limits for compliance reflect the severity of the violation and serve to avoid disruption of service. In the interim period the recipient must ensure that additional precautions are taken for safe use.**

9 Order No.	10 Code Section	11 Order Issued To Harish Bhatia	12 Compliance Date
1	LFHC 5.1.5.	Intercom not installed/operating - At each self-serve facility, there shall be installed a means of two-way communication between the self-serve attendant and each dispensing location. **Ensure all staff are trained in the use of the intercom.**	Mar 15, 2005
2	LFHC 6.2.1.	'No Smoking/Ignition Off' signs missing - At every dispensing facility there shall be installed, visible to all persons as they approach the dispensing location, signage which shall, a) be not less than 20 by 28 centimetres in size, and b) display either, i) the words in black letters not less than 25 mm in height on a yellow background "No Smoking - Turn Ignition Off", or ii) the international "No Smoking - Ignition Off" symbols in red and black at least 10 centimetres in diameter on a white background. **No smoking/ignition off signs are too high. Install decals at a lower level to ensure visibility.**	Mar 15, 2005

* Note: This report is eligible for the Voluntary Compliance option. Should you choose to exercise it, please adhere to the following procedure:

1. All inspectors orders appearing on the inspection report must be complied with.
2. The recipient must complete the Voluntary Compliance Option box. After complying with the above conditions, this inspection report must be returned directly to TSSA head office via fax or mail, by the last compliance date appearing on the inspection report.
3. Should TSSA fail to receive the Voluntary Compliance Form by the compliance date, an inspector will re-inspect and bill at double our normal rate.

For more information please contact TSSA at the number above or toll-free at 1-877-682-8772.
It is an offence to knowingly make a false statement or to furnish false information under the Act, the Regulations or a Ministers order. (Technical Standards and Safety Act, 2000; Sect 37)

13 Total Time	14 Travel Time	15 Billable Hours	16 Additional Charges
2	0.5	2	

Voluntary Compliance Option* - Eligible? [X] Yes [ ] No *Please, refer to guidelines

I hereby confirm that all the Inspector's orders, appearing on this inspection report have been completed.

Print Name Harish Bhatia Client Signature _____

Debbie Danek — Inspector

(905) 331-9921 — Inspector Fax Number

As a not-for-profit regulatory authority, TSSA operates on a cost recovery basis. An invoice will be issued for this activity.

Putting Public Safety First

(Note: This is not an invoice)

Perform Pre-License/Modification Inspection (FS) for Job 02041409[illegible]001 (0000765[illegible])

Description:

Assignments

Status: Complete by DAMCKD

Assigned To: Debbie Denall

Outcome: Inspection Complete & Issue Temp License

Schedule

Scheduled Start: Feb 18, 2004

Scheduled Complete: mmm dd, yyyy

Actual Start: mmm dd, yyyy hh:mm

Actual Complete: Aug 1[illegible], 2004 14:31

Reports

Details | Deficiencies | Facility/Locatio | Time | Documents | Comments | O/S Orders | Resolved/Orders

Inspection Report Number: FS-2004-0002002 First Inspection

Verify Information:

Orders Issued To: Trevor / Ross Downham

Date of Inspection: Aug 11, 2004 Re-Inspection Date: mmm dd, yyyy

Have you entered your time: Yes No

Inspection Display Address: 045 DUNLOAK @ SOUTH SERVICE RD, OAKVILLE, ON CA L6M 4J7

TECHNICAL STANDARDS and SAFETY AUTHORITY

www.tssa.org

14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario M8X 2X4
Ph - (416) 734-3300, Fax - (416) 231-1626
Toll - 1-877-682-8772

Fuel Safety Inspection Report

1 Report Number: FS-2004-0002992
2 File Number: 000076639191

Technical Standards and Safety Act, 2000

3 Location Address	4 License/Serial Number	5 Job Type	6 Inspection Date
845 BURLOAK @ SOUTH SERVICE RD OAKVILLE, ONTARIO L6M 4J7 CA	000076639191	New License/Modification Job (FS)	Aug 11, 2004
	7 Facility Type: Gasoline Station - Self Serve		

8 Client	
PETRO CANADA ATTN: DAVE JOYCE 3275 REBECCA STREET OAKVILLE, ON L6L 6N5 CA	The Facility/Equipment is inspected in accordance with Ontario's Technical Standards & Safety Act and the appropriate regulations and codes. When an inspector's order is issued, time limits for compliance reflect the severity of the violation and serve to avoid disruption of service. In the interim period the recipient must ensure that additional precautions are taken for safe use.

INSPECTION NOTE: Fax copy of final hydro inspection to TSSA 905-331-9921 Ensure Video display for diesel dispenser clear No smoking sign installed at diesel island

13 Total Time	14 Travel Time	15 Billable Hours	16 Additional Charges
2.5	1	2	

Voluntary Compliance Option* - Eligible? [ ] Yes [X] No *Please, refer to guidelines

I hereby confirm that all the Inspector's orders, appearing on this inspection report have been completed.

Print Name: Trevor / Ross Downham Client Signature: _____

Debbie Danek
Inspector

As a not-for-profit regulatory authority, TSSA operates on a cost recovery basis. An invoice will be issued for this activity.

Putting Public Safety First

(Note: This is not an invoice)

Job 033756581-009 (000076617764)

Job Description: PROP CYLINDER EXCHANGE - 1491222 ONTARIO LTD O/A PETRO CANADA

Job Type: New License/Modification Job | Date Created: Jan 31, 2008

Status: Licensed | Created By: THAMEANA

Issue Date: Dec 11, 2008 | Date Completed: Jan 31, 2008

Parent Job: 033756581-007 PROP CYLINDER EXCHANGE - 2116163 ONTARIO INC O/A GAS

Specific Location:

Details | Processes | Wetlhose | Client | Appliquip | Tank Vehicle | Facility/Location | Periodic Insp

Facility Type: Cylinder Exchange | Private Fuel Outlet:

Date Received by LRC: Jan 29, 2008 | Rush: | HS Facility Type 2: (None)

Applicant: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Owner: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Contact: Emad Mahmoud

Licence Holder: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Fuel Supplier: FSD: CALEDON PROPANE INC **
1 BETCMAT CT, PO BOX 430, BOLTON, ON, CA L7E 5T3 - P0022578

Bill To: FSD: 1491222 ONTARIO LTD O/A PETRO CANADA
845 BURLOAK DR, OAKVILLE, ON, CA

Bill Renewal To: FSD: 1491222 ONTARIO LTD O/A PETRO CA
845 BURLOAK DR, OAKVILLE, ON, CA

Total Wetting Time: 1 | Hazen Rank:

Total Propane Capacity(Job): 0 | Facility: 0

Total Liquid Fuel Capacity(Job): 0 | Facility: 0

Total Propane Capacity (USWG):

Total Liquid Fuel Capacity:

Reviewed by P.Eng | Date of P.Eng. Letter: mm/dd/yyyy

Job 033758581-009 (000076647764)

Job Description: PROP CYLINDER EXCHANGE - 1491222 ONTARIO LTD O/A PETRO CANADA

Job Type:	New License/Modification Job	Date Created	Jan 31, 2008
Status:	Licensed	Created By:	TEAMPAPA
Issue Date:	Dec 11, 2008	Date Completed	Jan 31, 2009
Parent Job:	033758581-007 PROP CYLINDER EXCHANGE - 2110191 ONTARIO INC O/A GAS		
Specific Location:			

Details | Processes | Warnings | Client | Appl/Equip | Tank Vehicle | Facility/Location | Periodic Insp

Engineer Contact: (None)

Location:
045 BURLOAK @ SOUTH SERVICE RD
OAKVILLE, ON
CA L6M 4J7

Address for New Location:
045 BURLOAK @ SOUTH SERVICE RD
OAKVILLE, ON
CA L6M 4J7

License Expiry Date: Jan 31, 2010 Next Renewal Date: Nov 30, 2009

Comments:

Overpayment: Total: 0 - Posted: Subtract Unposted: 0

Appendix VII
Government Correspondence

OAKVILLE

RECEIVED DEC 0 1 2009

November 13, 2009

Sabine Taker
Terrapex Environmental
920 Brant Street, Unit 16
Burlington, ON L7N 2L8

RE: Property Compliance Report
845 Burloak Drive, Lot # and Plan # Town of Oakville

Dear Ms. Taker:

We acknowledge your enquiry of November 12, 20009 and inform you as follows:

Survey not submitted.

A building permit was issued permitting construction. 04-359 New Construction, 04-861 Site Servicing, 06-55 Plumbing.

The Town of Oakville does not retain or report on construction inspections for permits older than two years unless required for first time occupancy.

As of this date there are no outstanding work orders under the Building Code Act against this property.

The above property is zoned C3A ARTERIAL COMMERCIAL

As of this date, the property is not subject to an outstanding work order under the property standards By-Law under Section 15.1 of the Building Code Act.

The property is not designated as a Heritage property

Yours truly,

BUILDING SERVICES DEPARTMENT

Alicia Patrick
Building Services Assistant

Disclaimer

"Unless specifically noted above, the Building Services Department does not report with respect to deficiency notices, investigations or violations of applicable laws, regulations or By-Laws, including Fire Code deficiencies. Please contact the appropriated department directly if this information is required.

Town of Oakville
P.O. Box 310, 1225 Trafalgar Road
Oakville, Ontario L6J 5A6
Tel. 905-845-6601
www.oakville.ca


C4 SP 754
C3A/B SP 754
C1 SP 754
F1 SP 2

OAKVILLE

Certificate of Occupancy

Sec.4 Oakville Zoning By-law

This certifies that the proposed use of the land, building or structure described below is not prohibited by the Town of Oakville Zoning By-law 1984-63 as amended.

Location of Building 845 Burloak Drive
(Lot No. Plan No.)

Business Name Petro Canada Gas Station

Proprietor of Business

Address same as above
(Postal Code)

Type of Building Commercial

Property Zoned C3A

Property Use propane cylinder sales and exchange

Remarks subject to applicable zoning regulations and compliance with all other applicable law

November 11, 2004
Date

For Zoning Administrator

Issuance of this certificate does not constitute Authorization of Occupancy where required by Section 11 of the Ontario Building Code Act.

Appendix VIII
Previous Reports

SUNCOR ENERGY PRODUCTS INC.

PHASE II ENVIRONMENTAL SITE ASSESSMENT (ESA)

SITE LOCATION:	Southeast Corner of Burloak and Wyecroft Streets Oakville, Ontario	**REPORT DATE:**	January 29, 2010
SITE NUMBER:	35235	**DRILLING DATE:**	December 22, 2009
PETRO-CANADA AUTHORIZATION	Ken Tedder	**MONITORING DATE:**	December 22, 2009
GENERIC SITE CONDITION STANDARDS:	Ontario Regulation153/04 Table 2 Industrial/Commercial	**PROJECT NUMBER:**	CB389.00

PURPOSE	The purpose of the ESA was to fully determine the presence, nature and extent of any subsurface petroleum hydrocarbon impact in the soil and groundwater beneath the site in accordance with Ontario Regulation (O.Reg.) 153/04.

SITE CHARACTERISTICS

- Site is currently a vacant lot.
- Site has no public utilities servicing the site.
- See Figure 1 for site location and Figure 2 for site plan.

Surrounding Land Uses:

- north — Wyecroft Road, Petro-Canada Service Station, commercial beyond;
- east — Empty lot with commercial beyond;
- south — Railway line with commercial/industrial beyond;
- west — Burloak Street with commercial/industrial beyond;

Topography and Surface Drainage:

- The site surface is slightly sloped to the south toward Lake Ontario.

GENERIC SITE CONDITION STANDARDS SELECTION

- Halton Region objected to the use of non-potable standards at the site citing that the area is “hydrogeologically sensitive”.
- The site is zoned for commercial land use.
- Grain-size analyses of soil samples collected from the site indicated that at least 100%of the soil was finer than the 0.075mm sieve.
- Based on O.Reg. 153/04, the Table 2 Site Condition Standards (SCS) for use in a potable groundwater situation at commercial/industrial lands are applicable (medium to fine grained SCS were chosen based on grain size analysis).
- The generic criteria selection chart (Figure 5), grain size analyses, and Halton Region correspondence are attached.

920 Brant Street, Suite 16, Burlington, Ontario L7R 4J1
Ph: (905) 632 5939 Fax: (905) 632 6793

SCOPE OF WORK

On December 22, 2009, five boreholes were advanced to depths of approximately 5.8 m to 6.7 m below grade using a track mounted CME75 equipped with 4" solid stem augers. Monitoring wells constructed of 50 -mm diameter PVC pipe were installed in all five of the boreholes. Well construction details are shown on the attached borehole/monitoring well logs. Work was conducted in accordance with the Petro-Canada *Environmental Site Assessment and Site Remediation Protocol, November, 2002 and O.Reg. 153/04.* Borehole locations are shown on Figure 2.

Number of Boreholes	5	Number of Monitoring Wells	5
Depth Range	5.8 to 6.7 m	Number of Existing Wells	0

Soil Analysis
- At least one soil sample from each of the boreholes, with the highest soil vapour (SV) reading was analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) and petroleum hydrocarbons (PHC) F1 to F4.
- One composite soil sample was submitted for grain size analysis..

Groundwater Analysis
- One groundwater sample collected from each of the five newly installed monitoring wells was analyzed for PHCs (F1-F4) and BTEX.
- One duplicate field groundwater sample (MW106) was collected from MW101.

SUBSURFACE CONDITIONS

The stratigraphy at the site comprised surficial top soil to depths of approximately 0.1 m overlying at least 1.5 m of silt and clay. This silt and clay layer is overlying at least 5.0 m of Queenston Shale. Borehole logs are attached.

Soil Vapour Survey
- SV concentrations ranged from 10 ppm up to 110 ppm in all soil samples surveyed.

Liquid-Phase Petroleum Hydrocarbons
- There was no liquid-phase petroleum hydrocarbon impact observed during the drilling program.

MONITORING

- On January 11, 2010, headspace vapours in monitoring wells ranged from <10 ppm ppm in MW103 to 70 ppm in MW101.
- On January 11, 2010, the depth to groundwater in the installed wells ranged from 2.56 m to 3.82 m below grade.
- There were no liquid-phase petroleum hydrocarbons observed during the monitoring.

RESULTS OF ANALYSIS (Tables 1, and 2; Figures 3 and 4)

- Grain-size analyses indicated medium to fine-grained soils in accordance with O.Reg 153/04.
- Concentrations of BTEX and PHC F1 and F2 were less than the applicable O.Reg 153/04 Table 2 SCS in all samples.
- Concentrations of BTEX and PHC F1 and F2 were less than the applicable O.Reg 153/04 Table 2 SCS in all groundwater samples.

Prepared by:

Mark van Oord, B.Sc.
Environmental Scientist

Reviewed by:

Jeff Stevenson, P.Geo.
Senior Project Manager

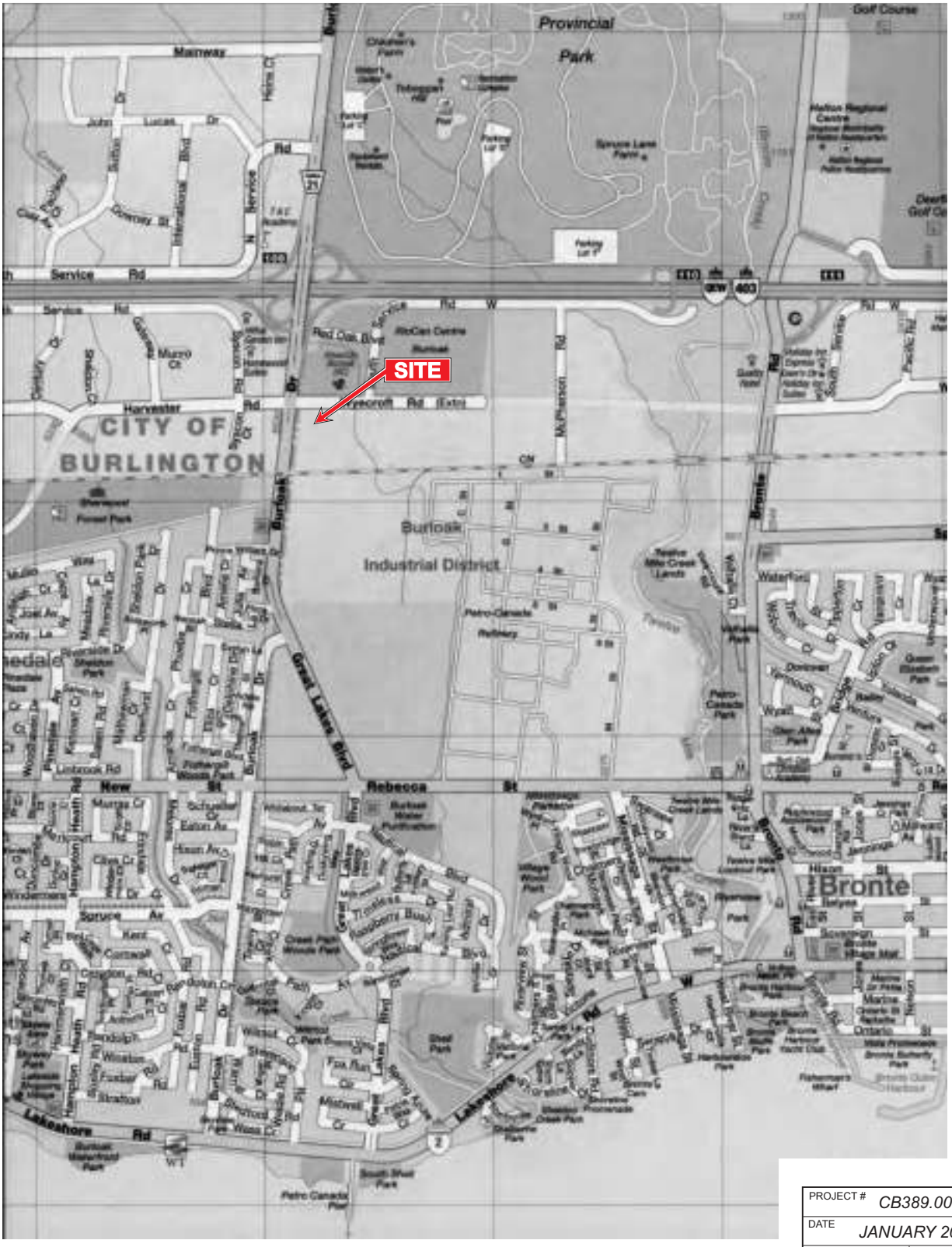
FIGURES

TERRAPEX
Environmental Ltd.

SITE LOCATION

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.



NOTE: MAP IMAGE TAKEN FROM MAPART
GOLDEN HORSESHOE ATLAS, 2008 EDITION PAGE 476.

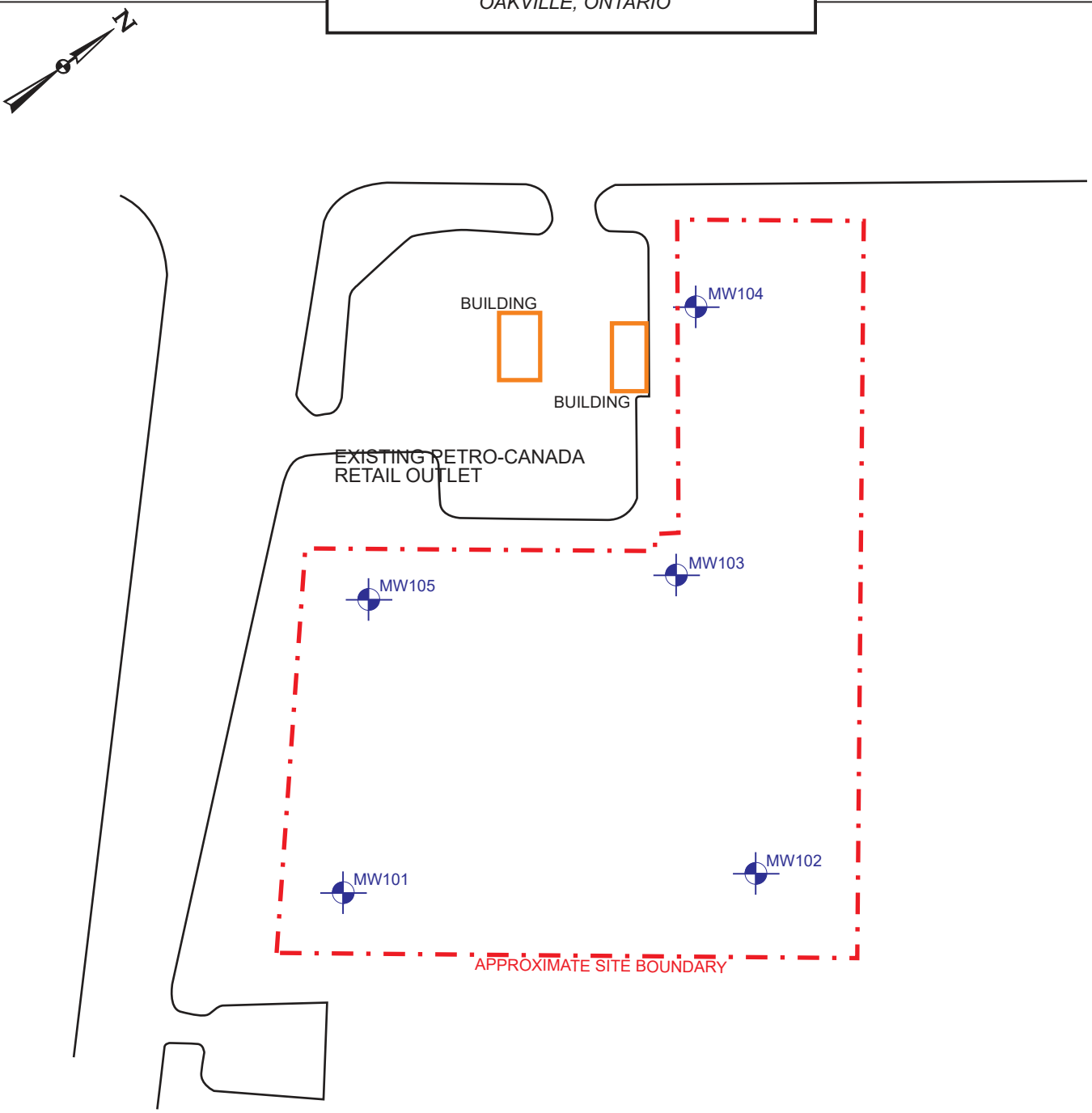
PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 1

TERRAPEX
Environmental Ltd.

GENERAL SITE LAYOUT

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.



0 30m 60m
(APPROXIMATE)

LEGEND

MONITORING WELL

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

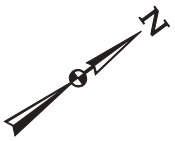
PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 2

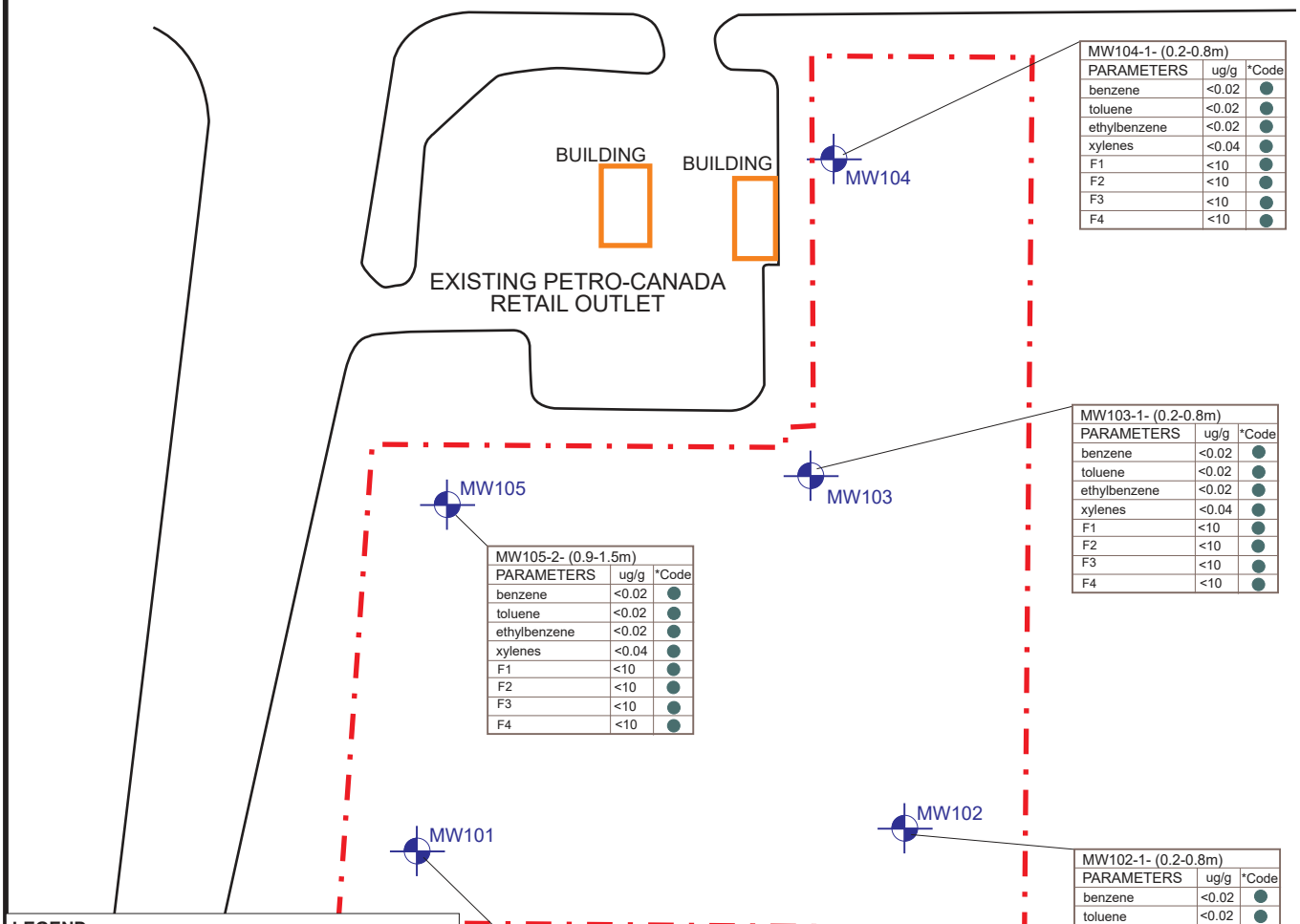
TERRAPEX Environmental Ltd.

SOIL ANALYSIS RESULTS

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.





MW104-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW103-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW105-2- (0.9-1.5m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW102-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW101-2- (0.9-1.5m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

LEGEND

- MONITORING WELL
- BOREHOLE

* CODE INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

ANALYSIS INFORMATION

Sample I.D. — Sample depth

BH103-4 - (depth)			TABLE 2 SCS
PARAMETERS	ug/g	*Code	
benzene	<0.05		0.24
toluene	<0.1		2.10
ethylbenzene	<0.1		0.28
xylenes	<0.1		25
F1	<10		180
F2	<10		250
F3	<10		2500
F4	<10		6600

Concentration — Code *

SCS (Site Conditions Standards) refer to Soil, Groundwater & Sediment Standards, MOE, March 2004.

0 30m 60m
(APPROXIMATE)

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

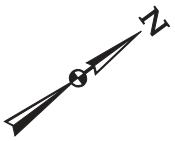
PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	RL
CHECKED	JS
DRAWING #	FIGURE 3

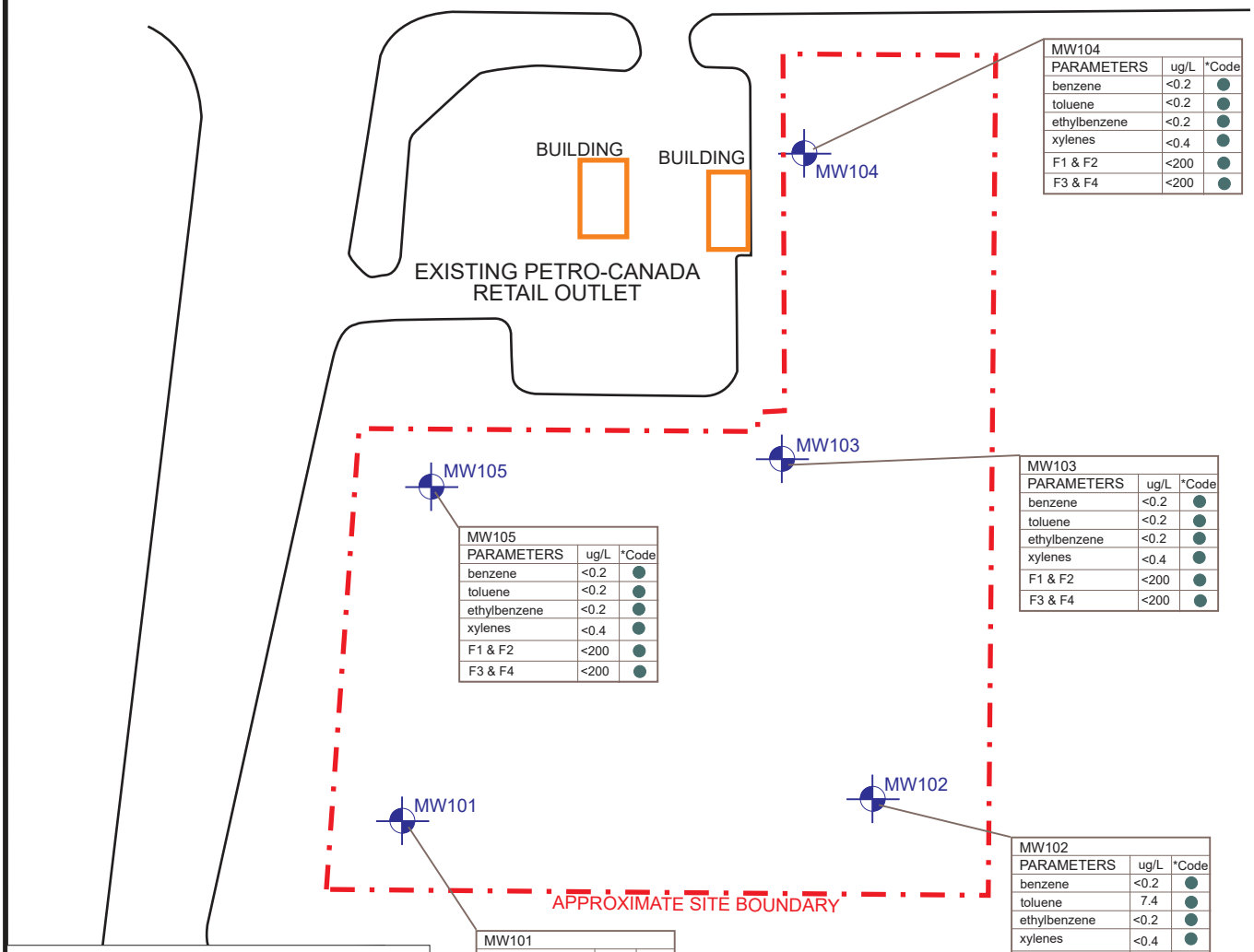
TERRAPEX Environmental Ltd.

WATER ANALYSIS RESULTS

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.





MW104		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW103		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW105		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW102		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	7.4	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW101		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

LEGEND

MONITORING WELL

* CODE INFORMATION

● Less than or equal to Table 2 SCS

◆ Greater than Table 2 SCS

ANALYSIS INFORMATION

Sample I.D. — Sample depth

BH103-4 - (depth)			TABLE 2 SCS
PARAMETERS	ug/L	*Code	
benzene	<0.20	●	5.0
toluene	<0.20	●	24
ethylbenzene	<0.20	●	2.4
xylenes	<0.60	●	300
F1 & F2	<200	●	1000
F3 & F4	<200	●	1000

Concentration — Code *

SCS (Site Condition Standard) refer to Soil, Groundwater & Sediment Standards, MOE, March 2004.

0 30m 60m
(APPROXIMATE)

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	RL
CHECKED	JS
DRAWING #	FIGURE 4

TABLES

TABLE 1 SOIL ANALYTICAL RESULTS - PETROLEUM HYDROCARBONS
Southeast corner of Burloak and Wyecroft, Burlington, Ontario

Terrapex Sample Name	Units	TABLE 2 STANDARD [1]	MW101-2	MW102-1	MW103-1	MW104-1	MW105-2
Sampling Date	-	-	22-Dec-09	22-Dec-09	22-Dec-09	22-Dec-09	22-Dec-09
Sample Depth	m bg	-	0.9 - 1.5	0.2 - 0.8	0.2 - 0.8	0.2 - 0.8	0.9 - 1.5
SV Reading	see note	ns	30 ppm	110 ppm	80 ppm	40 ppm	75 ppm
Benzene	µg/g	0.24	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Toluene	µg/g	2.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Ethylbenzene	µg/g	0.28	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Xylenes (total)	µg/g	25	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Petroleum Hydrocarbons, F1	µg/g	180	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F2	µg/g	250	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F3	µg/g	2500	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F4	µg/g	6600	< 10	< 10	< 10	< 10	< 10

[1] Standard from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* for industrial/commercial/community land use, fine and medium textured soil, in a potable groundwater situation

ns No standard
m bg Meters below grade
SV Reading Soil vapour reading (ppm or % LEL)
ppm Parts per million (by volume)
% LEL Percent of the lower explosive limit
BOLD Exceeds standard

TABLE 2 WATER ANALYTICAL RESULTS - PETROLEUM HYDROCARBONS
Southeast corner of Burloak and Wyecroft Street, Oakville, Ontario

Terrapex Sample Name	Units	TABLE 2 STANDARD [1]	MW101	MW102	MW103	MW104	MW105	MQ106 Field Duplicate of MW101
Sampling Date	-	-	12-Jan-10	12-Jan-10	12-Jan-10	12-Jan-10	12-Jan-10	12-Jan-10
CV Reading	see note	ns	70 ppm	10 ppm	<10 ppm	10 ppm	25 ppm	-
Benzene	µg/L	5.0	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toluene	µg/L	24	< 0.2	7.4	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	µg/L	2.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (total)	µg/L	300	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Petroleum Hydrocarbons, F1 & F2	µg/L	1,000	< 200	< 200	< 200	< 200	< 200	< 200
Petroleum Hydrocarbons, F3 & F4	µg/L	1,000	< 200	< 200	< 200	< 200	< 200	< 200

[1] Standard from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* for all types of land use, fine and medium textured soil, in a potable groundwater situation

ns No standard
CV Reading Combustible vapour reading (ppm or % LEL) in well headspace
ppm Parts per million (by volume)
% LEL Percent of the lower explosive limit
BOLD Exceeds standard

GENERIC SITE CONDITION STANDARDS SELECTION

TERRAPEX Environmental Ltd.

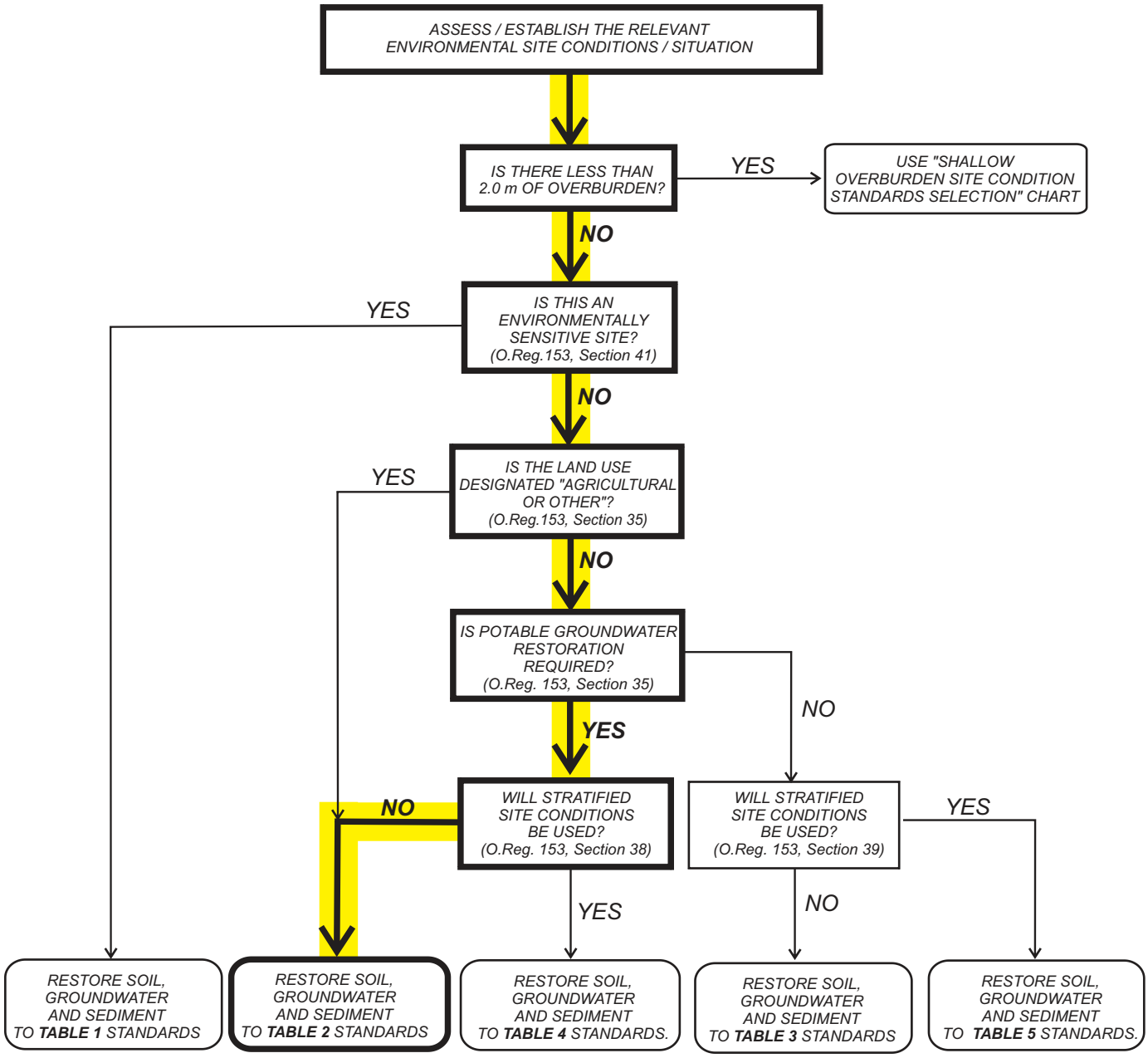
GENERIC SITE CONDITION STANDARDS SELECTION

FOR

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT

SUNCOR ENERGY PRODUCTS INC.



LEGEND

→ CRITICAL PATH

PROJECT # CB389.0

DRAWING # FIGURE 5

Maxxam Job #: A9H3613
Report Date: 2010/01/04

Terrapex Environmental Ltd
Client Project #: CB389.00
Project name: BURLOAK DR, OAKVILLE, ON

RESULTS OF ANALYSES OF SOIL

Maxxam ID		ES9062		
Sampling Date		2009/12/22		
COC Number		00617393		
	Units	**GRAIN SIZE ANALYSIS**	**RDL**	**QC Batch**
Miscellaneous Parameters				
Grain Size	%	FINE	N/A	2045982
Sieve - #200 (<0.075mm)	%	100	N/A	2045982
Sieve - #200 (>0.075mm)	%	0.12	N/A	2045982

RDL Reportable Detection Limit
QC Batch Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Halton

[illegible] DEPARTMENT
[illegible] Services
Tel (905) [illegible]
[illegible] 1-866-4HALTON (1-866-442-5866)

January 20, 2010

Andrea [illegible], P.Eng.
[illegible] Environmental Ltd.
[illegible] Street, Unit [illegible]
[illegible] ON
[illegible]

Facsimile: (905) 632-[illegible]

Dear Mr. [illegible]

Re: **Notification of Assumption that Groundwater under Southeast corner of Burloak Drive and Wyecroft Road, Oakville, Ontario (subject property) is Not a Raw Water Supply for a Drinking Water System**

Further to your correspondence received by the Regional Clerk's Office on December 23, 2009, Regional Municipality of Halton staff has prepared this letter in response to your *O.Reg. 153/04* Schedule C, Part I, Section 4(5) request to assume that the groundwater beneath the subject property "does not or will not serve as a raw water supply for a drinking water system, as defined in the *Safe Drinking Water Act (2002)*"

The key features for this request are presented in Table 1 below:

Table 1
Key Features Assessment

Key Feature	Is the Property located within or nearby these Key Features (yes/no)
Wellhead Protection Area	no
Environmentally Sensitive Area	no
Hydrogeologically Sensitive Area	yes
Rural Area	no
Water Well Records Within [illegible] metres	no

Region of Halton records indicate that this property is located within Oakville and is not within a wellhead protection area or an Environmentally Sensitive Area. However, the subject property is located within a hydrogeologically sensitive area, as identified in the Region's Aquifer Management Plan. Hydrogeologically sensitive areas were identified in Halton Region based on the depth to the water table combined with the depth to the uppermost aquifer.

Based on this information, Halton Region objects to the intention to apply non-potable water use criteria for the assessment of the subject property.

If you have any questions regarding this matter, please contact [illegible] ext. 7512.

Yours truly,

Jean Veinot, B.Sc.
Water Resources Specialist

c. Ministry of the Environment, Halton Peel District Office
Kristie Mathews, Manager of Healthy Environments
Eva Julian, Town of Oakville

BOREHOLE/MONITORING WELL LOGS

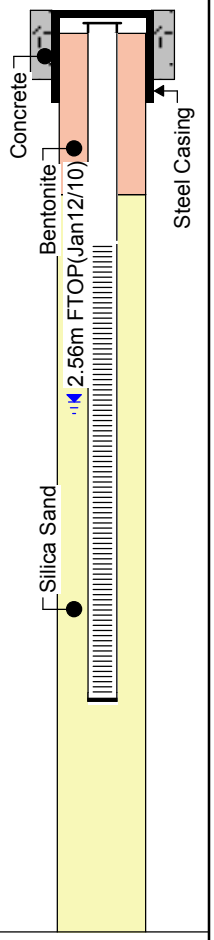
RECORD OF: MW101

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0		***TOPSOIL*** BROWN, MOIST								
1		***SILTY CLAY WITH SOME ORGANICS*** REDDISH, MOIST	1	SS	80	10	25 ppm			
2		-SOME SAND, GREY								
3 / 1		***SANDY SILT WITH TRACE CLAY*** REDDISH BROWN WITH GREY LAYERING, MOIST	2	SS	80	>50	30 ppm		BTEX, F1 - F4	
4										
5										
6			3	SS	100	>50	10 ppm			
7 / 2			4	SS	100	>50	<10 ppm			
8		***QUEENSTON SHALE***								
9										
10 / 3		-WET								
11										
12										
13 / 4										
14										
15										
16 / 5										
17										
18										
19 / 6										
20		End of Borehole								
21										
22										
23 / 7										
24										
25										
26 / 8										
27										
28										
29 / 9										



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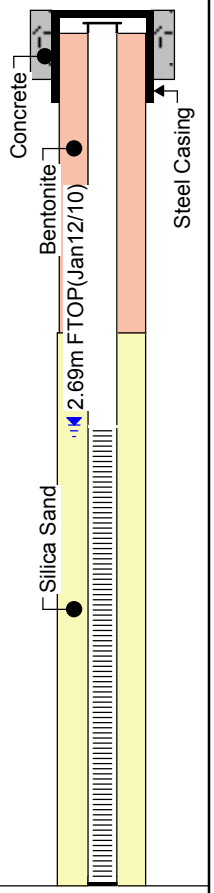
RECORD OF: MW102

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 / 0		***TOPSOIL AND ORGANICS*** BROWN, MOIST								
1 / 0		***SILTY CLAY WITH TRACE ORGANICS*** REDDISH, MOIST	1	SS	70	11	110 ppm		BTEX, F1 - F4	
3 / 1			2	SS	70	>50	20 ppm			
4 / 1		***QUEENSTON SHALE*** WEATHERED, GREY								
7 / 2		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



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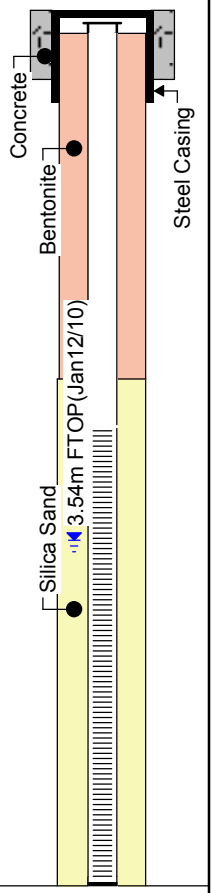
RECORD OF: MW103

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0		***TOPSOIL*** BROWN, MOIST								
1		***CLAYEY SILT WITH TRACE ORGANICS*** RED, MOIST	1	SS	80	14	40 ppm		BTEX, F1 - F4	
2 / 1			2	SS	95	34	35 ppm			
6 / 2			3	SS		>50	<10 ppm			
7		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



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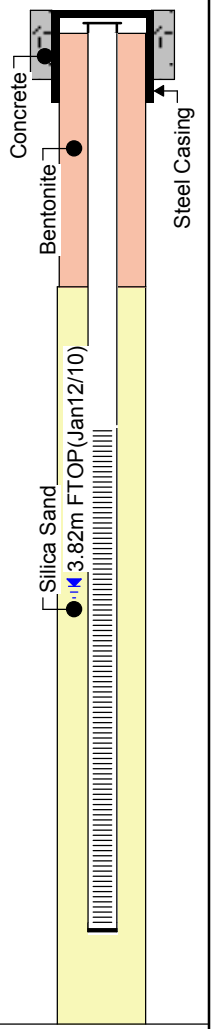
RECORD OF: MW104

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 / 0		***TOPSOIL*** BROWN, MOIST								
0 / 0		***CLAYEY SILT WITH TRACE ORGANICS*** RED/GREY, MOIST	1	SS	90	16	40 ppm		BTEX, F1 - F4	
3 / 1			2	SS	90	34	10 ppm			
6 / 2			3	SS	80	46	25 ppm			
7 / 2		***QUEENSTON SHALE*** RED								
22 / 7		End of Borehole								



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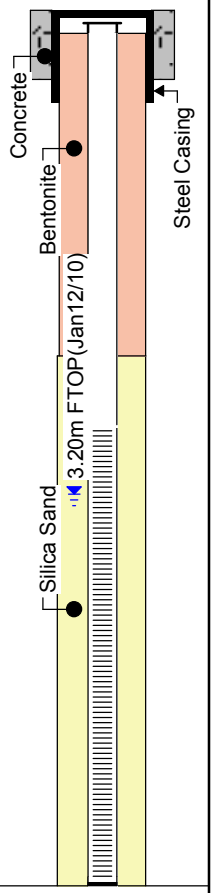
RECORD OF: MW105

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 – 2 / 0 – 0.5		***TOPSOIL*** BROWN, MOIST								
2 – 4 / 0.5 – 1		***CLAYEY SILT WITH TRACE ORGANICS*** RED, MOIST	1	SS	70	12	15 ppm			
4 – 6 / 1 – 2			2	SS	60	40	75 ppm		BTEX, F1 - F4	
6 / 2			3	SS	90	>50	20 ppm			
6 – 19 / 2 – 6		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



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Appendix VII Site Photographs

PHOTO 1: View of the PC retail fuel outlet, located west of the site.

PHOTO 2: View of the southeast section of the site and the rail tracks beyond.

PHOTO 3: View of Burloak Drive. Commercial and industrial facilities are beyond.

PHOTO 4: Looking southeast. Note the refinery tanks in the background and rail tracks adjacent to property.

Appendix X
Qualifications of the Assessor

TERRAPEX Environmental Ltd.

SABINE TAKEV, M.A.Sc.

Education:	Environmental Technician	2006	Niagara College, Niagara-on-the-Lake
	M.A.Sc. Materials and Metallurgical Engineering	1999	Freiberg University of Mining and Technology, Germany

Courses Completed:

Transportation of Dangerous Goods "Clear Language" Regulations
Standard First Aid and CPR
Petroleum Oriented Safety Training (POST)
Workplace Hazardous Materials Information System (WHMIS)
40-hour OSHA Training Course for Hazardous Waste Operations

Professional Associations:

EXPERIENCE

Aug. 2008 to present – Terrapex Environmental Ltd., Burlington, Ontario

Environmental Technician

Duties and responsibilities include:

- Research, interviews and site inspections for Phase I Environmental Sites Assessments (ESA);
- Site supervision of Phase II Environmental Sites Assessments (ESA) and in-situ/ex-situ remediation;
- Monitoring and maintenance of in-situ remediation systems, data interpretation and report preparation.

Sept. 2007 to Aug. 2008 – Franz Environmental inc., Mississauga, Ontario

Junior Environmental Scientist

Duties and responsibilities include:

- Phase I and II Environmental Site Assessments (ESA);
- Groundwater monitoring well installation; soil, groundwater and sediment sampling;
- Data collection and management;
- Data reduction and reporting.

Mar. 2007 to Sept. 2007 – Oakridge Landscaping Contractors Ltd.

Environmental Technician

Duties and responsibilities include:

- Restoration Planting Program along the Red Hill Creek Valley Parkway in Hamilton, Ontario.
- Identification of indigenous plant species and determination of suitable habitats.

May 2005 to Nov. 2006 – City of Hamilton, Hamilton, Ontario

Environmental Technician for the West Nile Virus Program

Duties and responsibilities include:

- Bio-assessment and efficacy of mosquito larviciding programs used in southern Ontario, Halton Region, Ontario.
- Surface water quality monitoring and sampling; collection and preservation of larvae and adult mosquito specimens for identification using dichotomous keys.
- Data management in GIS and regular reporting updates.

SELECTED PROJECT EXPERIENCE

Phase I Environmental Site Assessments

Department of Fisheries and Oceans: Phase I ESA at a DFO small craft harbour in northern Ontario.

Public Works and Government Services Canada: Field Investigation for potential soil and groundwater impacts at an agricultural research facility in Harrow, Ontario.

Mattamy Homes Ltd.: Phase I ESA for a residential development site in Milton, Ontario

Phase II Environmental Site Assessments

Petro Canada: Investigation and assessment of impacts to soil and groundwater at operating and former service stations across Ontario.

Sunoco Inc.: Investigation and assessment of impacts to soil and groundwater at former service stations.

Site Remediation

Petro Canada: Supervision of decommissioning of underground storage tanks, removal of facilities and removal of contaminated soil, at several sites in Southern Ontario.

Monitoring and Maintenance

Defence Construction Canada: Groundwater monitoring at a federal military facility in 5 Wing Goose Bay, NL

Petro Canada: Quarterly groundwater and vapour monitoring at several sites in Southern Ontario.

Suncor Energy Products Inc.: Groundwater and vapour monitoring at several sites in Southern Ontario.

Suncor Energy Products Inc.: Determination of water level draw down of several monitoring wells during product removal at a site in Kitchener.

P. JEFF STEVENSON, B.Sc., P.Geo.

Education:	B.Sc. Biology and Environmental Studies	1990	Brock University, St. Catharines

Courses Completed:
Standard First Aid and CPR
Petroleum Oriented Safety Training (POST)
Workplace Hazardous Materials Information System (WHMIS)

Professional Associations:
Association of Professional Geoscientists of Ontario

EXPERIENCE

2000 to present – Terrapex Environmental Ltd., Burlington, Ontario

Senior Project Manager

Responsible for management of a wide range of site assessment and remediation projects for a diverse client base. Responsibilities include direct accountability to clients for development and successful completion of projects on time and on budget. Project duties include preparation of proposals and budgets, funding and regulatory agency submissions and liaison, project design, allocation of resources, provision of technical and remote logistics expertise, and preparation of reports.

Typical projects include:

- Environmental Issues Inventory (EII) Phase II and III Environmental Site Assessments (ESA)
- Geo-Environmental Assessment of soil and groundwater
- Management/Remediation of contaminated soil and groundwater
- Compliance Audits

1996 to 2000 – Conor Pacific Environmental Technologies Inc., Mississauga, Ontario

Project Manager, Assessment and Remediation

Duties and responsibilities include:

- Complete project management including project design, cost projection, budget tracking, scheduling, client/regulatory agency liaison, and supervision of project team members.
- Design and implementation of environmental investigation projects in accordance with Federal, Provincial, and Municipal protocols
- Development, implementation, and supervision of remedial action plans for contaminated sites
- Development of INAC project submissions, tender documents, engineering specifications, and contracts for assessment and remediation projects
- Preparation of detailed proposals and cost estimates for complex and simple projects
- Liaison with and presentation to clients, government agencies, contractors, and the public
- Business development and marketing

1990 to 1996 – Arcturus Environmental Limited, Niagara Falls, Ontario

Project Manager and Technical Coordinator

Duties and responsibilities include:

- Management of Phase I, II and III Environmental Site Assessments (ESA), and soil and groundwater remediation projects
- Design and implementation of environmental investigation projects in accordance with Federal, Provincial, and Municipal protocols
- Project design, costing, and proposal preparation for site assessments and remediation projects
- Coordination, supervision and management of Phase I, II and III Environmental Site Assessments; sediment and surface water sampling programs; and soil and groundwater remediation projects
- Performed assessment tasks including; supervision of drilling operations, soil logging and sampling

SELECTED PROJECT EXPERIENCE

Phase I Environmental Site Assessments

Transport Canada: Phase I assessments of approximately 10 airport non-directional beacon sites in Ontario.

CN Real Estate: Phase I assessments of approximately 6 Rail Yard Sites in Ontario.

Rentway Ltd.: Phase I assessments of approximately 5 truck maintenance facilities in Ontario.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Phase I assessments of 21 Canada Coast Guard, Marine Communications and Search and Rescue Sites in Ontario.

Private: Phase I assessments of approximately 20 residential, commercial, and industrial sites for various private clients.

Phase II Environmental Site Assessments

Petro-Canada: Senior Manager and contact for preferred supplier agreement: Project manager for 100+ Phase II assessments of petroleum storage and distribution facilities.

United Petroleum Inc. (UPI): Senior Project Manager for 20+ Phase II assessments of petroleum storage and distribution facilities.

Ultramar Inc.: Senior Project Manager for 20+ Phase II assessments of petroleum storage and distribution facilities.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for Phase II assessments of 4 Canada Coast Guard, Marine Communications and Light station Sites in Ontario.

Sunoco Inc.: Project Manager for assessments of soil and groundwater at approximately 35 retail petroleum outlets and three distribution terminals in Ontario.

Petro-Canada: Technical Coordinator/Field Supervisor/ for soil and groundwater assessments at approximately 30 retail petroleum outlets, and six bulk terminals across Ontario.

ICG Propane: Project Manager for soil and groundwater assessments of approximately three retail outlets in Ontario.

United Co-op: Technical Coordinator/Field Supervisor for assessments of soil and groundwater at approximately 8 bulk petroleum outlets in Ontario.

CP Rail: Field Supervisor for assessments of soil and groundwater at 8 major rail yards and subdivision in Ontario.

CN Real Estate: Field Supervisor for assessments of soil and groundwater at two major rail yards in Ontario.

Department of National Defence/Public Works Canada: Field Supervisor for an assessment of fuel oil contaminated soil at approximately 300 military housing facilities at CFB Borden.

Transport Canada: Project Manager for assessment of soil and groundwater at approximately 13 NDB and airport sites in Ontario.

Plazek Auto-Recyclers: Project Manager of assessment of impacted fill materials at a major auto-wrecking yard including MOE and third party liaison.

RCMP and Public Works and Government Services Canada: Technical Coordinator/Field Supervisor for environmental impact assessment at a former RCMP firing range

CIBC: Project Manager for Phase II and Phase III assessment of soil and groundwater on residential properties in Ontario.
Rentway Ltd.: Project Manager for assessment of soil and groundwater at approximately 5 truck maintenance facilities in Ontario.

Hydro One Remotes: Project Manager for assessment of soil and groundwater at a diesel generating station in Kingfisher Lake, Ontario, including remedial options feasibility study qualitative risk assessment, and development of a remedial action plan.

Hazardous and Non-Hazardous Site Remediation

Mattamy Homes Inc.: Senior Project Manager for large-scale remediation of former asphalt plant property for residential brownfield development.

Petro-Canada: Senior Manager and contact for preferred supplier agreement: Project manager for 60+ site decommissioning and remediation projects at petroleum storage and distribution facilities in Ontario.

Petro-Canada: Senior Manager of large-scale in-situ multi-technology soil and groundwater remediation system covering a former distribution terminal and surrounding private properties in Toronto.

Ultramar Inc.: Senior Project Manager for large scale ex-situ bioremediation at former heating oil distribution terminal in Ontario.

United Petroleum Inc. (UPI): Senior Project Manager for 10+ decommissioning and remediation projects at petroleum storage and distribution facilities.

Sunoco Inc.: Project Manager/Technical Coordinator for decommissioning and remediation of approximately 55 retail petroleum outlets and two distribution terminals in Ontario.

Petro Canada: Technical Coordinator/Field Supervisor for decommissioning and remediation of approximately 20 retail petroleum outlets and three distribution terminals in Ontario.

RCMP and Public Works and Government Services Canada: Project Manager for a delineation study, remedial action plan, and hazardous soil remediation at a former RCMP firing range in Ontario.

Timminco Metals: Project Manager for hazardous chlorinated solvent remediation including remedial action plan development, recovery and treatment system design, and project implementation at a former Adhesives plant in Ontario.

Fort Albany First Nation: Project Manager/Technical Coordinator for an on-site surface water and groundwater pumping and treatment and ex-situ soil bioremediation project at a Contractor's camp in the community of Fort Albany, including project design, approvals, and implementation.

Kingfisher Lake First Nation: Project Manager for a large scale soil bio-remediation project in the community of Kingfisher Lake, including project design, approvals, and implementation.

Kasabonika Lake First Nation: Project Manager for a large scale soil bio-remediation project in the community of Kasabonika Lake, including project design, approvals, and implementation

Plazek Auto-recyclers: Project Manager for preliminary negotiations for a Site Specific Risk Assessment of impacted fill at an auto-wrecking yard in Ontario.

Transport Canada: Project Manager for underground storage tank decommissioning and remediation at three airport sites in Ontario.

CIBC: Project Manager for remediation of impacted soils at a residential property in Ontario including temporary relocation of a residential structure

Rentway Ltd.: Project Manager for remediation of three truck maintenance facilities in Ontario.

Compliance Audits

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for storage tank audits at 25 Canada Coast Guard, Marine Communications, Search and Rescue, and Light station Sites in Ontario.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for halocarbon surveys at 30 Canada Coast Guard, Marine Communications, Search and Rescue, and Light station Sites in Ontario.

SUNCOR ENERGY PRODUCTS INC.

PHASE II ENVIRONMENTAL SITE ASSESSMENT (ESA)

SITE LOCATION:	Southeast Corner of Burloak and Wyecroft Streets Oakville, Ontario	**REPORT DATE:**	March 2, 2010
SITE NUMBER:	35235	**DRILLING DATE:**	December 22, 2009
PETRO-CANADA AUTHORIZATION	Ken Tedder	**MONITORING DATE:**	January 12 and February 25, 2010
GENERIC SITE CONDITION STANDARDS:	Ontario Regulation153/04 Table 2 Industrial/Commercial	**PROJECT NUMBER:**	CB389.00

PURPOSE	The purpose of the ESA was to fully determine the presence, nature and extent of any subsurface petroleum hydrocarbon impact in the soil and groundwater beneath the site in accordance with Ontario Regulation (O.Reg.) 153/04.

SITE CHARACTERISTICS

- Site is currently a vacant lot.
- Site has no public utilities servicing the site.
- See Figure 1 for site location and Figure 2 for site plan.

Surrounding Land Uses:

- north — Wyecroft Road, Petro-Canada Service Station, commercial beyond;
- east — Empty lot with commercial beyond;
- south — Railway line with commercial/industrial beyond;
- west — Burloak Street with commercial/industrial beyond;

Topography and Surface Drainage:

- The site surface is slightly sloped to the south toward Lake Ontario.

GENERIC SITE CONDITION STANDARDS SELECTION

- Halton Region objected to the use of non-potable standards at the site citing that the area is “hydrogeologically sensitive”.
- The site is zoned for commercial land use.
- Grain-size analyses of soil samples collected from the site indicated that at least 100%of the soil was finer than the 0.075mm sieve.
- Based on O.Reg. 153/04, the Table 2 Site Condition Standards (SCS) for use in a potable groundwater situation at commercial/industrial lands are applicable (medium to fine grained SCS were chosen based on grain size analysis).
- The generic criteria selection chart (Figure 5), grain size analyses, and Halton Region correspondence are attached.

920 Brant Street, Suite 16, Burlington, Ontario L7R 4J1
Ph: (905) 632 5939 Fax: (905) 632 6793

SCOPE OF WORK

On December 22, 2009, five boreholes were advanced to depths of approximately 5.8 m to 6.7 m below grade using a track mounted CME75 equipped with 4" solid stem augers. Monitoring wells constructed of 50 -mm diameter PVC pipe were installed in all five of the boreholes. Well construction details are shown on the attached borehole/monitoring well logs. Work was conducted in accordance with the Petro-Canada *Environmental Site Assessment and Site Remediation Protocol, November, 2002 and O.Reg. 153/04.* Borehole locations are shown on Figure 2.

Number of Boreholes	5	Number of Monitoring Wells	5
Depth Range	5.8 to 6.7 m	Number of Existing Wells	0

Soil Analysis
- At least one soil sample from each of the boreholes, with the highest soil vapour (SV) reading was analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) and petroleum hydrocarbons (PHC) F1 to F4.
- One composite soil sample was submitted for grain size analysis..

Groundwater Analysis
- One groundwater sample collected from each of the five newly installed monitoring wells was analyzed for PHCs (F1-F4) and BTEX.
- One duplicate field groundwater sample (MW106) was collected from MW101.

SUBSURFACE CONDITIONS

The stratigraphy at the site comprised surficial top soil to depths of approximately 0.1 m overlying at least 1.5 m of silt and clay. This silt and clay layer is overlying at least 5.0 m of Queenston Shale. Borehole logs are attached.

Soil Vapour Survey
- SV concentrations ranged from 10 ppm up to 110 ppm in all soil samples surveyed.

Liquid-Phase Petroleum Hydrocarbons
- There was no liquid-phase petroleum hydrocarbon impact observed during the drilling program.

MONITORING

- On January 11, 2010, headspace vapours in monitoring wells ranged from <10 ppm ppm in MW103 to 70 ppm in MW101.
- On January 11, 2010, the depth to groundwater in the installed wells ranged from 2.56 m to 3.82 m below grade.
- There were no liquid-phase petroleum hydrocarbons observed during the monitoring.

RESULTS OF ANALYSIS (Tables 1, and 2; Figures 3 and 4)

- Grain-size analyses indicated medium to fine-grained soils in accordance with O.Reg 153/04.
- Concentrations of BTEX and PHC F1 and F2 were less than the applicable O.Reg 153/04 Table 2 SCS in all samples.
- Concentrations of BTEX and PHC F1 and F2 were less than the applicable O.Reg 153/04 Table 2 SCS in all groundwater samples.

Prepared by:

Mark van Oord, B.Sc.
Environmental Scientist

Reviewed by:

Jeff Stevenson, P.Geo.
Senior Project Manager

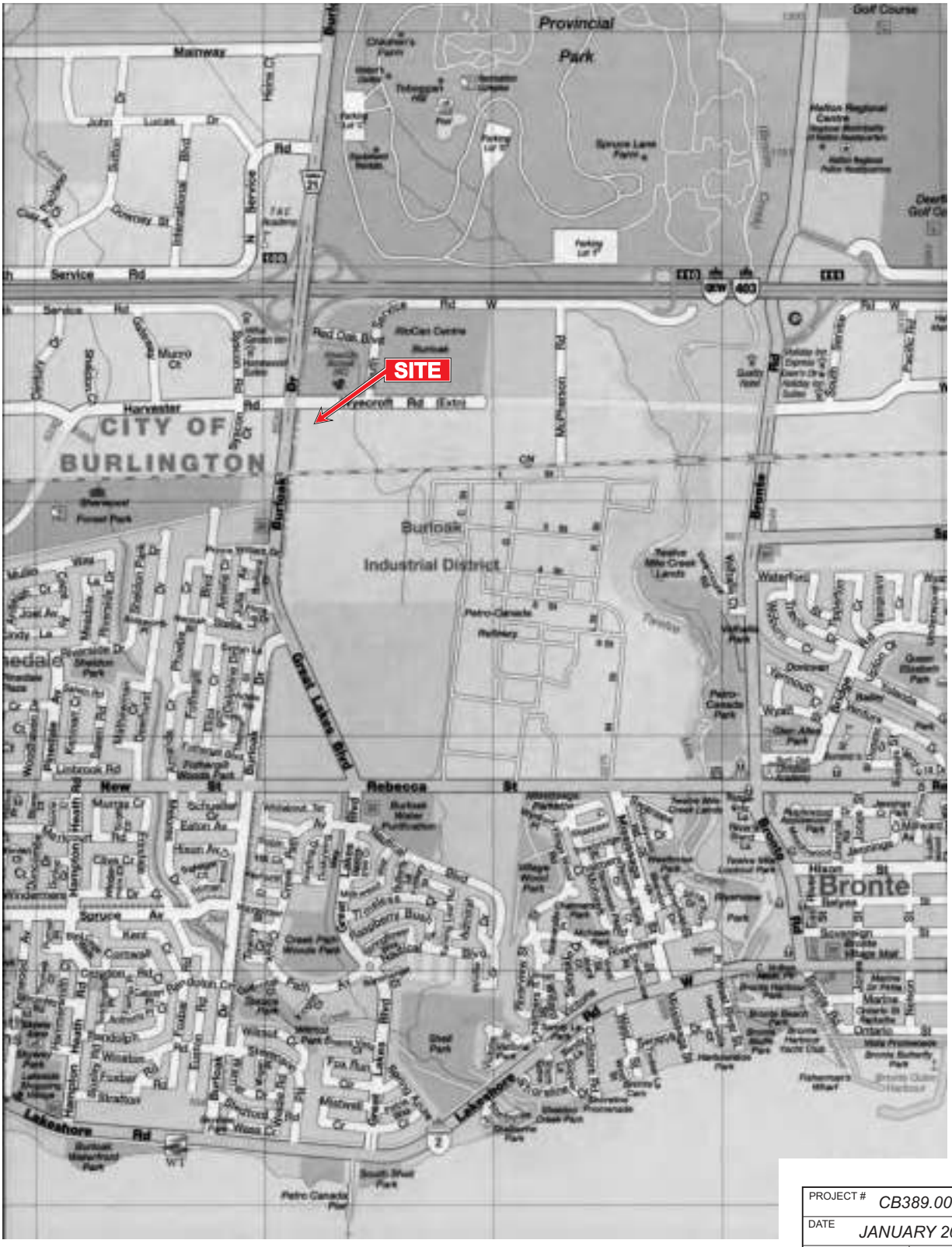
FIGURES

TERRAPEX
Environmental Ltd.

SITE LOCATION

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY
PRODUCTS INC.



NOTE: MAP IMAGE TAKEN FROM MAPART
GOLDEN HORSESHOE ATLAS, 2008 EDITION PAGE 476.

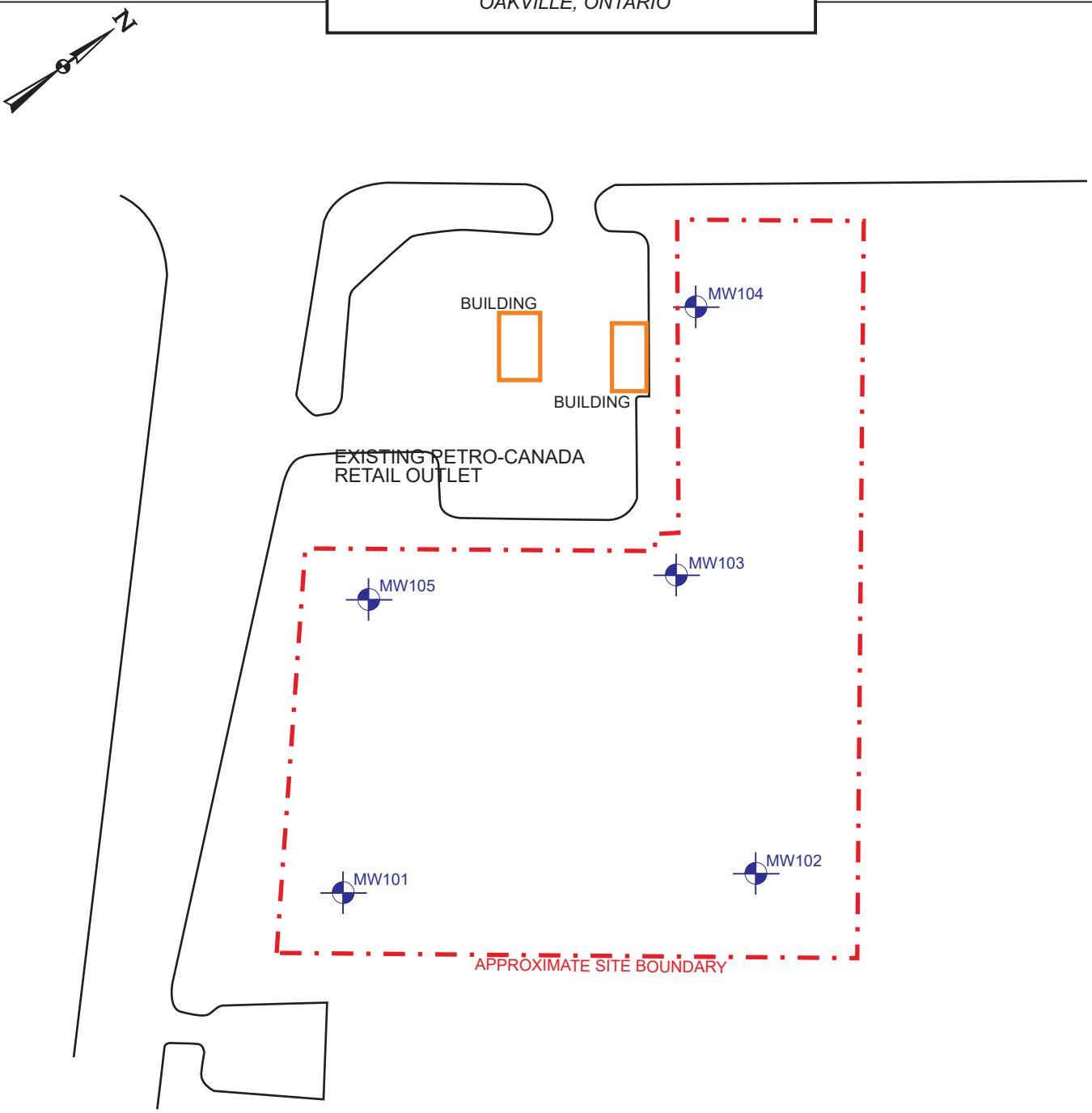
PROJECT #	CB389.00
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 1

TERRAPEX
Environmental Ltd.

GENERAL SITE LAYOUT

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.



0 30m 60m
(APPROXIMATE)

LEGEND

MONITORING WELL

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

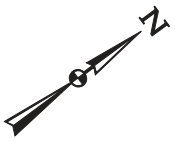
PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	PBR
CHECKED	JS
DRAWING #	FIGURE 2

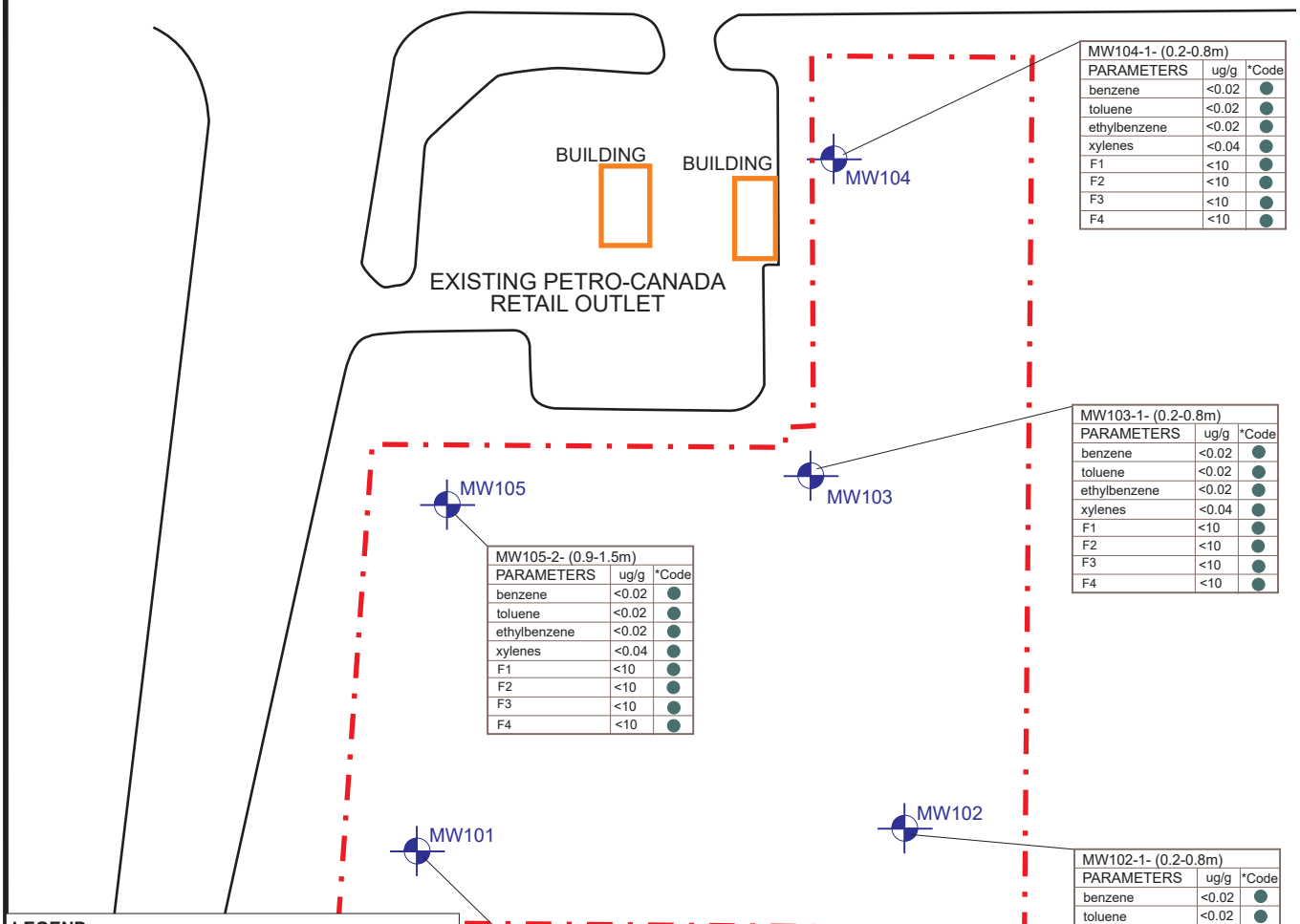
TERRAPEX Environmental Ltd.

SOIL ANALYSIS RESULTS

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.





MW104-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW103-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW105-2- (0.9-1.5m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW102-1- (0.2-0.8m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

MW101-2- (0.9-1.5m)

PARAMETERS	ug/g	*Code
benzene	<0.02	
toluene	<0.02	
ethylbenzene	<0.02	
xylenes	<0.04	
F1	<10	
F2	<10	
F3	<10	
F4	<10	

LEGEND

- MONITORING WELL
- BOREHOLE

* CODE INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

ANALYSIS INFORMATION

Sample I.D. — Sample depth

BH103-4 - (depth)			TABLE 2 SCS
PARAMETERS	ug/g	*Code	
benzene	<0.05		0.24
toluene	<0.1		2.10
ethylbenzene	<0.1		0.28
xylenes	<0.1		25
F1	<10		180
F2	<10		250
F3	<10		2500
F4	<10		6600

Concentration — Code *

SCS (Site Conditions Standards) refer to Soil, Groundwater & Sediment Standards, MOE, March 2004.

0 30m 60m
(APPROXIMATE)

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

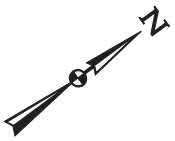
PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	RL
CHECKED	JS
DRAWING #	FIGURE 3

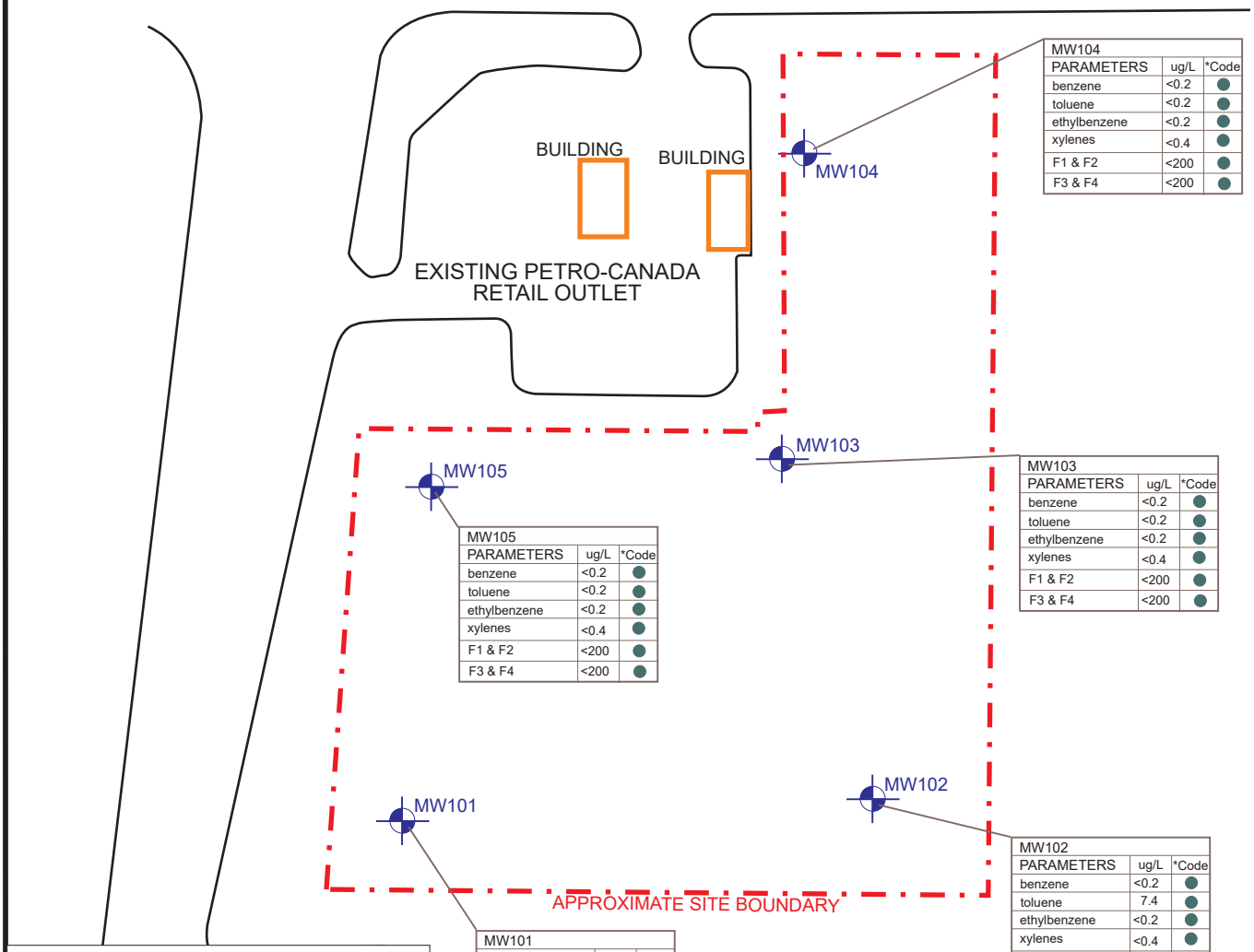
TERRAPEX Environmental Ltd.

WATER ANALYSIS RESULTS

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT
SUNCOR ENERGY PRODUCTS INC.





MW104		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW103		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW105		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW102		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	7.4	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

MW101		
PARAMETERS	ug/L	*Code
benzene	<0.2	●
toluene	<0.2	●
ethylbenzene	<0.2	●
xylenes	<0.4	●
F1 & F2	<200	●
F3 & F4	<200	●

LEGEND

MONITORING WELL

* CODE INFORMATION

● Less than or equal to Table 2 SCS

◆ Greater than Table 2 SCS

ANALYSIS INFORMATION

Sample I.D. — Sample depth

BH103-4 - (depth)			TABLE 2 SCS
PARAMETERS	ug/L	*Code	
benzene	<0.20	●	5.0
toluene	<0.20	●	24
ethylbenzene	<0.20	●	2.4
xylenes	<0.60	●	300
F1 & F2	<200	●	1000
F3 & F4	<200	●	1000

Concentration — Code *

SCS (Site Condition Standard) refer to Soil, Groundwater & Sediment Standards, MOE, March 2004.

0 30m 60m
(APPROXIMATE)

NOTE: CREATED FROM GOOGLE EARTH IMAGE, FIELD OBSERVATIONS AND A SURVEY PLAN PROVIDED BY CLIENT.

PROJECT #	CB389.00
SCALE	AS SHOWN
DATE	JANUARY 2010
DRAWN	RL
CHECKED	JS
DRAWING #	FIGURE 4

TABLES

TABLE 1 SOIL ANALYTICAL RESULTS - PETROLEUM HYDROCARBONS
Southeast corner of Burloak and Wyecroft, Burlington, Ontario

Terrapex Sample Name	Units	TABLE 2 STANDARD [1]	MW101-2	MW102-1	MW103-1	MW104-1	MW105-2
Sampling Date	-	-	22-Dec-09	22-Dec-09	22-Dec-09	22-Dec-09	22-Dec-09
Sample Depth	m bg	-	0.9 - 1.5	0.2 - 0.8	0.2 - 0.8	0.2 - 0.8	0.9 - 1.5
SV Reading	see note	ns	30 ppm	110 ppm	80 ppm	40 ppm	75 ppm
Benzene	µg/g	0.24	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Toluene	µg/g	2.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Ethylbenzene	µg/g	0.28	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Xylenes (total)	µg/g	25	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Petroleum Hydrocarbons, F1	µg/g	180	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F2	µg/g	250	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F3	µg/g	2500	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons, F4	µg/g	6600	< 10	< 10	< 10	< 10	< 10

[1] Standard from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* for industrial/commercial/community land use, fine and medium textured soil, in a potable groundwater situation

ns No standard
m bg Meters below grade
SV Reading Soil vapour reading (ppm or % LEL)
ppm Parts per million (by volume)
% LEL Percent of the lower explosive limit
BOLD Exceeds standard

TABLE 2 WATER ANALYTICAL RESULTS - PETROLEUM HYDROCARBONS
Southeast corner of Burloak and Wyecroft Street, Oakville, Ontario

Terrapex Sample Name	Units	TABLE 2 STANDARD [1]	MW101	MW102	MW103	MW104	MW105	MW106 Field Duplicate of MW101
Sampling Date	-	-	1/12/2010*	1/12/2010*	1/12/2010*	1/12/2010*	1/12/2010*	1/12/2010*
CV Reading	see note	ns	70 ppm	10 ppm	<10 ppm	10 ppm	25 ppm	-
Benzene	µg/L	5.0	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toluene	µg/L	24	< 0.2	7.4	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	µg/L	2.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylenes (total)	µg/L	300	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Petroleum Hydrocarbons, F1 & F2	µg/L	1,000	< 200	< 200	< 200	< 200	< 200	< 200
Petroleum Hydrocarbons, F3 & F4	µg/L	1,000	< 200	< 200	< 200	< 200	< 200	< 200

[1] Standard from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* for all types of land use, fine and medium textured soil, in a potable groundwater situation

ns No standard
CV Reading Combustible vapour reading (ppm or % LEL) in well headspace
ppm Parts per million (by volume)
% LEL Percent of the lower explosive limit
* PHC F2-F4 fractions sampled 02/25/2010
BOLD Exceeds standard

GENERIC SITE CONDITION STANDARDS SELECTION

TERRAPEX Environmental Ltd.

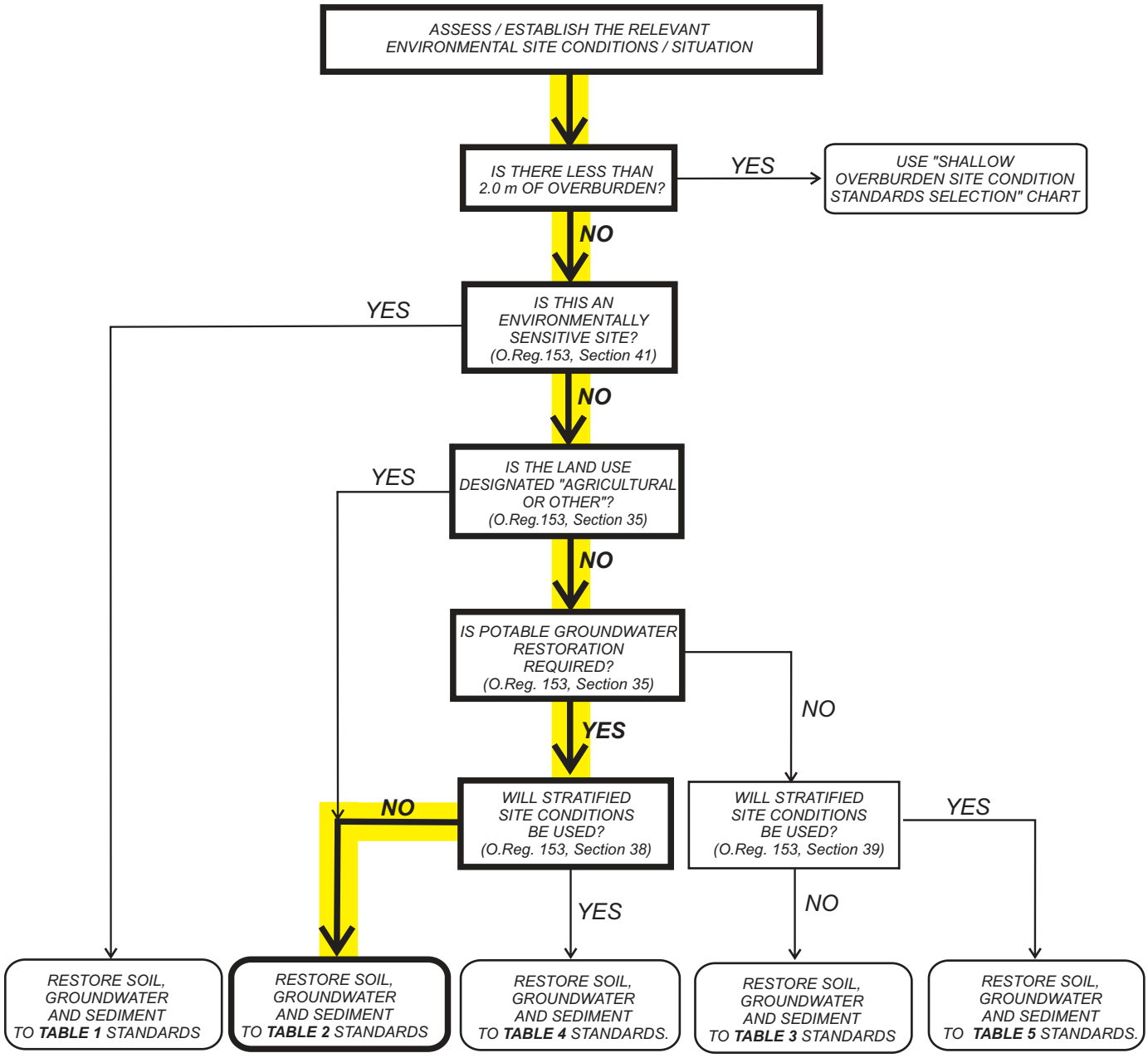
GENERIC SITE CONDITION STANDARDS SELECTION

FOR

BURLOAK DRIVE @ WYECROFT ROAD
OAKVILLE, ONTARIO

CLIENT

SUNCOR ENERGY PRODUCTS INC.



LEGEND

→ CRITICAL PATH

PROJECT # CB389.0

DRAWING # FIGURE 5

Maxxam Job #: A9H3613
Report Date: 2010/01/04

Terrapex Environmental Ltd
Client Project #: CB389.00
Project name: BURLOAK DR, OAKVILLE, ON

RESULTS OF ANALYSES OF SOIL

Maxxam ID		ES9062		
Sampling Date		2009/12/22		
COC Number		00617393		
	Units	**GRAIN SIZE ANALYSIS**	**RDL**	**QC Batch**
Miscellaneous Parameters				
Grain Size	%	FINE	N/A	2045982
Sieve - #200 (<0.075mm)	%	100	N/A	2045982
Sieve - #200 (>0.075mm)	%	0.12	N/A	2045982

RDL Reportable Detection Limit
QC Batch Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

PUBLIC WORKS DEPARTMENT
Water Planning Services
Tel: (905) 825-6000 Fax: (905) 825-8789
Toll free: 1-866-4HALTON (1-866-442-5866)

January 20, 2010

Andrea [illegible], P.Eng
[illegible] Environmental Ltd.
[illegible], Unit 16
[illegible], ON
[illegible]

Facsimile: (905) 632-6795

Dear Ms. [illegible]

Re: **Notification of Assumption that Groundwater under Southeast corner of Burloak Drive and Wyecroft Road, Oakville, Ontario (subject property) is Not a Raw Water Supply for a Drinking Water System**

Further to your correspondence received by the Regional Clerk's Office on December 23, 2009, Regional Municipality of Halton staff has prepared this letter in response to your *O.Reg. 153/04* Schedule C, Part I, Section 4(5) request to assume that the groundwater beneath the subject property "does not or will not serve as a raw water supply for a drinking water system, as defined in the *Safe Drinking Water Act (2002)*".

The key features for this request are presented in Table 1 below:

Table 1
Key Features Assessment

Key Features	Is the Property located within or nearby these Key Features (yes/no)
Wellhead Protection Area	no
Environmentally Sensitive Area	no
Hydrogeologically Sensitive Area	yes
Rural Area	no
Water Well Records Within 100 metres	no

Region of Halton records indicate that this property is located within Oakville and is not within a wellhead protection area or an Environmentally Sensitive Area. However, the subject property is located within a hydrogeologically sensitive area, as identified in the Region's Aquifer Management Plan. Hydrogeologically sensitive areas were identified in Halton Region based on the depth to the water table combined with the depth to the uppermost aquifer.

Based on this information, Halton Region objects to the intention to apply non-potable water use criteria for the assessment of the subject property.

If you have any questions regarding this matter, please contact [illegible] ext. 7512.

Yours truly,

Jean Veinot, B.Sc.
Water Resources Specialist

c. Ministry of the Environment, Halton Peel District Office
Kristie Mathews, Manager of Healthy Environments
Eva Julian, Town of Oakville

BOREHOLE/MONITORING WELL LOGS

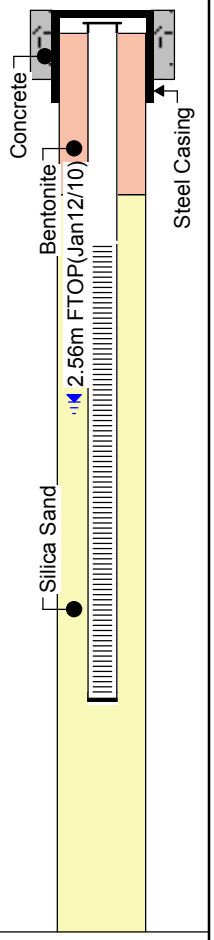
RECORD OF: MW101

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0		***TOPSOIL*** BROWN, MOIST								
1		***SILTY CLAY WITH SOME ORGANICS*** REDDISH, MOIST	1	SS	80	10	25 ppm			
2		-SOME SAND, GREY								
3 / 1		***SANDY SILT WITH TRACE CLAY*** REDDISH BROWN WITH GREY LAYERING, MOIST	2	SS	80	>50	30 ppm		BTEX, F1 - F4	
4										
5										
6			3	SS	100	>50	10 ppm			
7 / 2			4	SS	100	>50	<10 ppm			
8		***QUEENSTON SHALE***								
9										
10 / 3		-WET								
11										
12										
13 / 4										
14										
15										
16 / 5										
17										
18										
19 / 6										
20		End of Borehole								
21										
22										
23 / 7										
24										
25										
26 / 8										
27										
28										
29 / 9										



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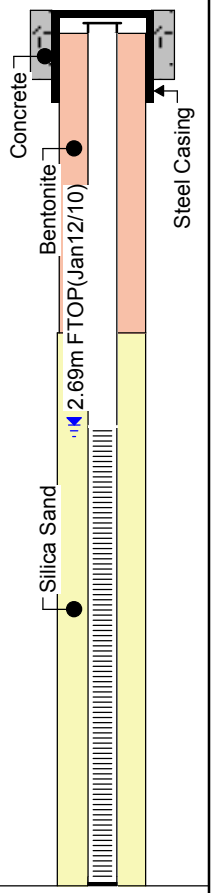
RECORD OF: MW102

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 / 0		***TOPSOIL AND ORGANICS*** BROWN, MOIST								
1 / 0		***SILTY CLAY WITH TRACE ORGANICS*** REDDISH, MOIST	1	SS	70	11	110 ppm		BTEX, F1 - F4	
3 / 1			2	SS	70	>50	20 ppm			
4 / 1		***QUEENSTON SHALE*** WEATHERED, GREY								
7 / 2		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



LOGGED BY: **AC** INPUT BY: **MVO** CHECKED BY: **JS** INPUT DATE: **JANUARY 13, 2010**

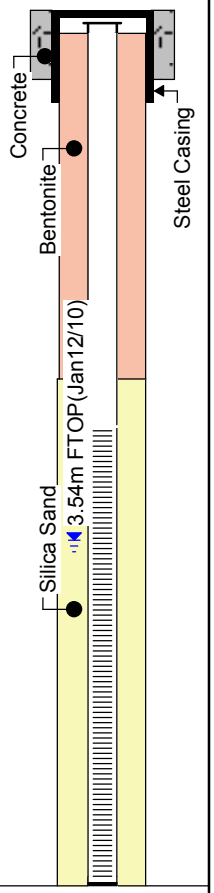
RECORD OF: MW103

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0		***TOPSOIL*** BROWN, MOIST								
1		***CLAYEY SILT WITH TRACE ORGANICS*** RED, MOIST	1	SS	80	14	40 ppm		BTEX, F1 - F4	
2 / 1			2	SS	95	34	35 ppm			
6 / 2			3	SS		>50	<10 ppm			
7		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



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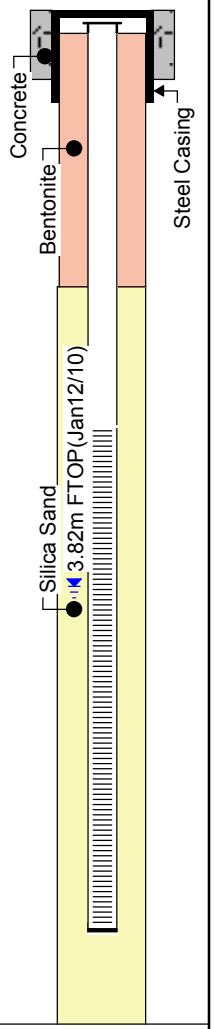
RECORD OF: MW104

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 / 0		***TOPSOIL*** BROWN, MOIST								
0 / 0		***CLAYEY SILT WITH TRACE ORGANICS*** RED/GREY, MOIST	1	SS	90	16	40 ppm		BTEX, F1 - F4	
3 / 1			2	SS	90	34	10 ppm			
6 / 2			3	SS	80	46	25 ppm			
7 / 2		***QUEENSTON SHALE*** RED								
22 / 7		End of Borehole								



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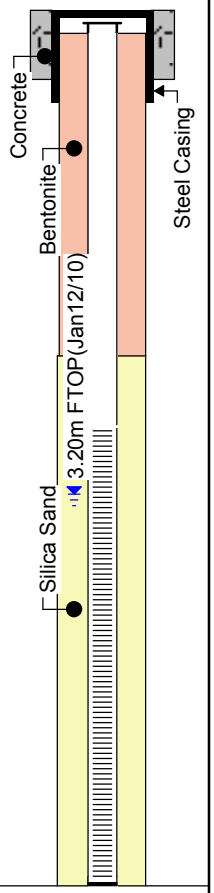
RECORD OF: MW105

PROJECT NO: **CB389.00**
CLIENT: **PETRO CANADA**
ADDRESS LINE 1: **SOUTHEAST CORNER**
ADDRESS LINE 2: **BURLOAK AND WYECROFT**
CITY / PROVINCE: **OAKVILLE**

BORING DATE: **DECEMBER 22, 2009**
TYPE OF AUGER: **SOLID**
TYPE OF RIG: **CME 75 TRACK MOUNT**
CONTRACTOR: **GEO-ENVIRONMENTAL DRILLING INC.**

TERRAPEX Environmental Ltd.

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Comment	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface								
0 – 2 / 0 – 0.5		***TOPSOIL*** BROWN, MOIST								
2 – 4 / 0.5 – 1		***CLAYEY SILT WITH TRACE ORGANICS*** RED, MOIST	1	SS	70	12	15 ppm			
4 – 6 / 1 – 2			2	SS	60	40	75 ppm		BTEX, F1 - F4	
6 / 2			3	SS	90	>50	20 ppm			
6 – 19 / 2 – 6		***QUEENSTON SHALE*** RED								
19 / 6		End of Borehole								



LOGGED BY: **AC** INPUT BY: **MVO** CHECKED BY: **JS** INPUT DATE: **JANUARY 13, 2010**

Appendix VII Site Photographs

Photo 1
Comments: Site entry point on Burloak Drive southwest of the Site. Looking northwest

Photo 2
Comments: General view of the Site. Looking north.

Photo 3
Comments: Convenience store in the central portion of the Site. Looking southwest.

Photo 4
Comments: General View of the Site. Looking west.

Photo 5
Comments: Northeastern border of the Site with the vacant neighboring property to the southeast of the Site.

Photo 6
Comments: Transformer located to the southeast of the Site.

Photo 7
Comments: Entrance and Exit of car wash station. Looking northeast.

Photo 8
Comments: Behind the car wash station showing the new development work on the neighboring property. Looking no

Photo 9
Comments: Diesel pump located to the south of the convenience store in the central portion of the Site. Lookin

Photo 10
Comments: Interceptor beside the car wash station to the west.

Appendix VIII Qualification of the Assessors

CRAIG BEATON, PEng, QP_{ESA}

Position:	Senior Project Manager, Ottawa Office
Qualifications:	PEng Biological (Environmental Option) Dipl. Engineering Dipl. Environmental Engineering Technology
Experience:	Terrapex Environmental Ltd. 2005 to present
Professional Associations:	Professional Engineers Ontario (PEO) - Membership Number: 100141707

Mr. Beaton has experience working in all stages of assessment and remediation projects, which includes over a 100 environmental site assessments and delineation of petroleum, volatile organic compound (VOC) polycyclic aromatic hydrocarbons (PAH) and metal contamination. Fieldwork coordination, field supervision, soil and groundwater sampling, groundwater monitoring and other data collection are integral components of Mr. Beaton's contributions. Mr. Beaton also has experience with post-field tasks, such as completion of MECP Record of Site Conditions, analytical data interpretation, groundwater flow interpretation, drafting and report preparation.

SELECTED PROJECT EXPERIENCE

Environmental Site Assessments

Various Clients: Completion/management of over 65 Phase I ESAs at various sites in Ontario and Quebec, including manufacturing facilities, industrial sites, commercial and residential properties and vacant lots. The Phase I ESAs were conducted in accordance with the Canadian Standards Association (CSA) Standard Z768-01 (2001, re-affirmed in 2012) including site inspection, historical research and records review, interviews and report preparation.

PWGSC: Main Project Manager and client contact for the completion of Phase I ESAs, and a surface water and sediment sampling program for 5 lakes within the Rideau Canal system. Responsibilities included, coordination with client and subcontractors, development of sampling plans to confirm surface water and sediment conditions, interpretation of analytical results with respect to Federal CCME guidelines, and assess each site in accordance with Federal Contaminated Sites Action Plan (FCSAP) (2009). In addition to the FCSAP contaminated site ranking, Mr. Beaton assessed sediment contaminant exceedances using the reference approach provided in the Canada-Ontario Agreement (COA) entitled *Decision-Making Framework for Assessment of Great Lakes Contaminated Sediment* (Chapman, 2008).

Commercial Client: Completed the review of multiple Phase I and II ESA for various sites in BC and Alberta as part of a larger due diligence assessment project that was completed to evaluate potential liability prior to the purchase on a large group of properties located across Canada. Responsibilities include the review of available reports; identification of data gaps/limitations of the completed investigations; determination of anticipated risk and an estimated dollar value associated with the potential liability for each site.

MECP: Main Project Manager and reviewer for Phase II and Phase III ESAs for a site in Northern Ontario. Reviewed previous assessments to develop a work plan to delineate observed PHC impacts in soil and groundwater impacts. Responsibilities coordination with client, subcontractors and supplier, interpretation of laboratory analytical data and report composition. Based on the resulted of the delineation program designed a multi-technique remediation plan to remediate petroleum impacts. The remediation plan included soil excavation, backfill amendment and the injection of a biostimulant to address inaccessible and residual impacts.

Petroleum Retailers: Main Project Manager and client contact for Phase II ESAs at future and former petroleum retail outlets. Responsibilities have included management of field work, coordination with drilling and contracting companies, interpretation of field data and laboratory analytical data, review of analytical results figures and groundwater flow diagrams, and report composition.

GEOFFREY L. LUSSIER, Dipl.

Position: Senior Project Manager, Burlington Office

Qualifications: Terrain and Water Resources Technology Diploma

Experience:

Terrapex Environmental Ltd.	1996 to present
Jacques Whitford Environment Limited	1995 to 1996

Mr. Lussier is a Senior Project Manager for Terrapex with over 25 years of conducting and managing site assessment and remediation projects for many industrial, government, First Nation, petroleum, and rail clients. His role includes project design, budgeting, liaison with clients and regulatory agencies, project implementation, data interpretation, reporting, remedial option feasibility study and remedial action plan design and administration.

Several years of intensive field experience provide Mr. Lussier with an excellent understanding of field operations and the ability to provide practical, efficient solutions to potential problems unique to this type of work.

Representative projects include the following:

TDL Group: Managed several phase I and phase II assessments of various properties across southern Ontario.

Petroleum Client: Managed a Phase II ESA conducted in support of a risk assessment for petroleum impacted soil at depth at a former bulk fueling facility. Managed the remediation by excavation of shallow soil exceeding the Property-Specific Standards. Prepared technical documents associated with the work in support of the Risk Assessment and submission of a Record of Site Condition.

Parkland Fuel Corporation (formerly Pioneer Energy LP): Project Manager and main contact for 100+ site assessment and site decommissioning and remediation projects at petroleum storage and distribution facilities in Ontario.

Petroleum Clients: Supervision of soil and groundwater assessments and decommissioning of underground storage tanks and the removal of contaminated soil at 100+ retail petroleum outlets and bulk fuel terminals across Ontario including Petro-Canada, Shell, Sunoco, and Ultramar.

Canadian Pacific Railway: Supervision of the excavation of 8,000 m^3 of soil impacted with diesel fuel at a decommissioned rail yard and construction of an on-site engineered bio-pile facility to treat the soil.

Ultramar Ltd.: Supervision of the excavation of 8,000 m^3 of soil impacted with fuel oil at a decommissioned bulk storage facility including the excavation, diversion and reconstruction of a portion of municipal roadway and utilities and construction of an on-site engineered bio-pile facility to treat the soil.

Royal Bank of Canada: Supervision of soil and groundwater assessments at approximately 15 real estate properties across southern Ontario.

First Nation client: Conducted a community wide assessment addressing impact on soil, groundwater and surface water, as well as a hydrogeologic study of the waste disposal site at several remote communities in Northwestern Ontario.

Federal Client: Managed Phase II/III ESAs and developed remedial feasibility options for four parcels of land in Southern Ontario.

Federal Client: Managed three Phase III ESAs and developed remedial feasibility options for three armouries in downtown Toronto, Ontario.

Federal Client: Managed and developed a Before-After Control Impact (BACI) Study Design as part of a harbour sediment dredging project.

SEBA HAMDAN, MASc, EIT

Education:	Masc. in Geo-Environmental Engineering	2021	Queen's University
	Bachelor of Environmental Engineering	2010	Al-Baath University

Safety Training:
Standard First Aid and CPR
Petroleum Oriented Safety Training (POST)
Workplace Hazardous Materials Information System (WHMIS)

EXPERIENCE

2021 to Present – Terrapex Environmental Ltd., Ottawa, Ontario

Environmental Scientist

Ms. Hamdan is an Environmental Scientist responsible for management of a wide range of site assessment and remediation projects for many industrial, government, petroleum clients. Her role includes conducting Phase I / Phase II (ESAs), groundwater monitoring and remediation reports; borehole drilling, monitoring well installation, sampling of soil, groundwater, separator influent/effluent and soil vapour for laboratory analysis; supervision and direction of remedial excavations and site restorations; interpreting groundwater monitoring data and laboratory soil and groundwater analytical data as compared to applicable federal and provincial standards; preparation of figures and charts for visual representation of data; Quality Assurance/ Quality Control of (QA/QC) of outgoing documents; Coordinating field work with clients and subcontractors.

REPRESENTATIVE PROJECT EXPERIENCE

Phase I/One Environmental Site Assessments

Petroleum company (2023): Contributed to the completion of a Phase One ESA at an industrial site in Nepean. The Phase One ESA was completed in accordance with the requirements of Ontario Regulation (O. Reg.) 153/04 (with amendments) under the Environmental Protection Act, *Records of Site Condition – Part XV.1 of the Act,* which included review of the site information, site inspections, identifying PCAs, APECs, and COCs.

Federal Government (2023): Contributed to the completion of a Phase One ESA at six sites in the City of Ottawa. The Phase One ESA was completed in accordance with the requirements of Ontario Regulation (O. Reg.) 153/04 (with amendments) under the Environmental Protection Act, *Records of Site Condition – Part XV.1 of the Act,* which included review of the site information, site inspections, identifying PCAs, APECs, and COCs.

Groundwater Monitoring and Sampling

Conducted a groundwater monitoring and sampling event for various clients and various sites in Ottawa, Renfrew County, and Lanark County. Monitoring tasks included monitoring headspace combustible vapour concentrations and groundwater elevations at individual monitoring wells. Performed groundwater sampling for laboratory analysis under a proper chain of custody for petroleum hydrocarbon contamination delineation. Other tasks included maintaining proper traffic control measures and coordinating with a dedicated Terrapex traffic control personnel to ensure tasks were being safely performed.

Provincial Government 2022: Prepared a technical report for the contaminant migration modelling for the expansion area on an existed landfill in Ontario.

2021 – Queen's University (Geo-Engineering Centre at Queen's- RMC)

Research Assistant

Duties and responsibilities included testing GCL samples used as a liner for a wastewater treatment lagoon in Nunavut. Interpreting and reporting results to the client and training new students on GCL testing methods.

2017 – Queen's University
Geo-Engineering Centre at Queen's- RMC

Graduate Student and Research Assistant

Research scopes focused on barrier systems of landfills and containment facilities and especially the Geosynthetic Clay Liners (GCLs) for landfill cover and base systems. Experienced in designing, running, observing, index testing, and interpreting results of different projects. Ms. Hamdan investigated the hydraulic and physical performance of the GCLs in landfill cover and base systems after long-term exposure to wet and dry cycles. Examined the long-term performance of GCLs under a high hydraulic gradient simulating the GCLs usage for dams and ponds.

Publications

- Rowe, Ronald & Hamdan, Seba. (2022). Performance of GCLs after long term wet-dry cycles under a defect in GMB in a landfill. Geosynthetics International. 30. 1-46. 10.1680/jgein.21.00023a.
- Rowe, Ronald & Hamdan, Seba. (2021). Effect of wet-dry cycles on standard & polymer-amended GCLs in covers subjected to flow over the GCL. Geotextiles and Geomembranes. 49. 10.1016/j.geotexmem.2021.03.010.

2017 – Queen's University

Teaching Assistant

- Geotechnical Engineering course (3rd year _Civil Engineering)

2011 – The General Establishment of Drinking Water & Wastewater Systems Survey Assistant, Syria

Environmental Engineer

Duties and responsibilities included participating in several projects related to designing and executing wastewater networks in the suburban area of the City of Homs.

Table 5.3.1: Minimum Number of Barrier-free Parking Spaces	
Total Number of Parking Spaces in all Parking Areas on the Lot	**Minimum Number of Barrier-free Parking Spaces**
101 to 200	1, plus 3% of the total number of *parking spaces* in the *parking area*
201 to 1000	2, plus 2% of the total number of *parking spaces* in the *parking area*
1,001 or greater	11, plus 1% of the total number of *parking spaces* in the *parking area*

5.3.2 Dimensions and Paths of Travel

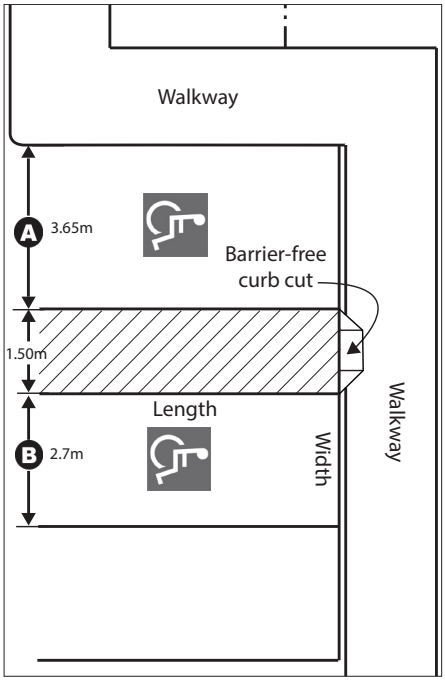
a) The minimum dimensions for a *barrier-free parking space* shall be in accordance with the dimensions of Table 5.3.2, below.

Table 5.3.2: Dimensions of Barrier-free Parking Spaces		
Type	**Width**	**Length**
Type A	3.65 m	5.7 m
Type B	2.7 m	5.7 m

b) Where the minimum number of *barrier-free parking spaces* required is even, an equal number of Type A and Type B *barrier-free parking spaces* shall be required.

c) Where the minimum number of *barrier-free parking spaces* required is odd, the additional *barrier-free parking space* remaining shall be a Type B *barrier-free parking space*. Where the minimum number of *barrier-free parking spaces* is one, the *barrier-free parking space* shall be a Type A *barrier-free parking space*. *(2023-024)*

d) A *barrier-free* path of travel 1.5 metres in width is required abutting the entire length of the longest side of a *barrier-free parking space*. A path of travel can be shared by two *barrier-free parking spaces*. *(2015-018)*



Two barrier-free parking spaces, regardless of width, can share a barrier-free path of travel.

5.4 Bicycle Parking Spaces

5.4.1 Minimum Number of Bicycle Parking Spaces

a) The minimum number of *bicycle parking spaces* required for *uses* permitted by this By-law are established and calculated in accordance with the ratios set out in Table 5.4.1, below.

b) In no circumstance shall the number of minimum *bicycle parking spaces* required on a *lot* be greater than 30.

Table 5.4.1: Ratios of Minimum Number Bicycle Parking Spaces	
Use	**Minimum Number of Bicycle Parking Spaces**
Blended Rates for Lots with Multiple Premises	
Where multiple *premises* are located on a *lot* in any non-residential *zone*	The greater of 2 or 1.0 per 1,000.0 m^2 *net floor area*, plus the minimum number of *bicycle parking spaces* for the *dwellings*
Residential Uses	
Apartment dwelling	1.0 per *dwelling* (1)(2)

TERRAPEX

SUNCOR ENERGY PRODUCTS PARTNERSGUP

PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT

845 BURLOAK DRIVE, OAKVILLE, ON.
Outlet#35207

FINAL REPORT

March 21, 2024

PROJECT #CT3959.00

Terrapex
90 Scarsdale Road
Toronto, Ontario, M3B 2R7
Telephone: (416) 245-0011
www.terrapex.com

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TABLE OF CONTENTS

FIGURES

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TABLES

APPENDICES

LIST OF ACRONYMS

amsl	Above mean sea level
ANSI:	Area of Natural or Scientific Interest
APEC:	Area of Potential Environmental Concern
AST:	Aboveground Storage Tank
BH:	Borehole
BTEX:	Benzene, Toluene, Ethylbenzene, and Xylenes
CALA:	Canadian Analytical Laboratories Association
COC:	Contaminant of Concern
COPC:	Contaminant of Potential Concern
CSA:	Canadian Standards Association
CSM:	Conceptual Site Model
CV:	Combustible Vapour
DO:	Dissolved Oxygen
DNAPL:	Dense Non-aqueous Phase Liquid
EC:	Electrical Conductivity
ERIS:	Environmental Risk Information Service Ltd.
EPA:	Environmental Protection Act
ESA:	Environmental Site Assessment
F1-F4	Petroleum hydrocarbon fractions 1 through 4 of the CCME Canada Wide Standards
HDPE:	High density polyethylene
LDPE:	Low density polyethylene
LEL:	Lower Explosive Limit
LNAPL:	Light Non-aqueous Phase Liquid
LPH:	Liquid-Phase Petroleum Hydrocarbons (free-product)
MECP:	Ministry of Environment, Conservation and Parks
mg/kg:	milligrams per kilogram
m bg	metres below grade
mg/L:	milligrams per litre
MGRA:	Modified Generic Risk Assessment (under O. Reg. 153/04)
MNDMNRF:	Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry
MOE:	Ontario Ministry of Environment
MOECC:	Ontario Ministry of Environment and Climate Change
MW:	Monitoring well
NAPL:	Non-aqueous Phase Liquid
NHIC:	Natural Heritage Information Centre
ORP:	oxidation-reduction potential
OSHA:	Occupational Safety and Health Act
PAHs:	Polycyclic Aromatic Hydrocarbons
PCA:	Potentially Contaminating Activity (from O. Reg. 153/04)
PCBs:	Polychlorinated Biphenyls
PHC:	Petroleum Hydrocarbon
PID:	Photo Ionization Detector
ppm:	Parts Per Million
PVC:	Polyvinyl chloride

QA:	Quality Assurance
QC:	Quality Control
QP:	Qualified Person under O. Reg. 153/04
RA:	Risk Assessment
RAP:	Remedial Action Plan
RDL:	Reportable Detection Limit
RSC:	Record of Site Condition (under O. Reg. 153/04)
R.R.O. 1990:	Revised Regulations of Ontario, 1990.
SAR:	Sodium Adsorption Ratio
SCC:	Standards Council of Canada
SCS:	Site Condition Standards (from O. Reg. 153/04)
SOP:	Standard Operating Procedure
SV:	Soil Vapour
SVOCs:	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure (Reg. 558/00)
TOC:	Total Organic Carbon
TP:	Test Pit
TPH:	Total Petroleum Hydrocarbons
UST:	Underground Storage Tank
VOCs:	Volatile Organic Compounds
WWIS:	Water Well Information System

1.0 EXECUTIVE SUMMARY

Terrapex was retained by the Suncor Energy Products Partnership to conduct a Phase Two Environmental Site Assessment (ESA) of the property located at 845 Burloak Drive in Oakville, Ontario (the "Site" or "Phase Two Property").

It is understood that the Phase Two ESA documented herein was undertaken as part of the Town of Oakville development application process that requires environmental investigations to be completed in accordance with Ontario Regulation (O. Reg.) 153/04 under the Environmental Protection Act, *Records of Site Condition - Part XV.1 of the Act*. It is noted that a Record of Site Condition (RSC) will not be filed for the Site as a change to a more sensitive land use is not required.

A Phase One ESA was completed by Terrapex in February 2024 in accordance with the requirements of O. Reg. 153/04. The Phase One ESA identified several areas of potential environmental concern (APECs) at the Site, resulting from current and past commercial and light industrial uses of the Site and off-Site properties. As a result, a Phase Two ESA was required to investigate soil and groundwater quality at the Site in accordance as per O.Reg 153/04.

The date of the last work including all planning for the Site investigation, conducting the investigation, and receiving and evaluating the information gathered during the Site investigation for the Phase Two ESA (per Section 33.5 (1) (a) of O. Reg. 153/04) is February 16, 2024, the date the final laboratory results were received and reviewed.

The findings of the Phase One ESA are documented in Terrapex's report entitled *Phase One Environmental Site Assessment, 845 Burloak Drive, Oakville, Ontario, Final Report,* dated March 21, 2024.

The Site is irregular in shape, comprising an approximate area of 0.546 ha (5,461 m²). The Site is currently being operated as a Petro Canada branded retail fuel outlet with a convenience store and carwash.

The Site is located on the southeast corner of the intersection of Burloak Drive and Wyecroft Road at 845 Burloak Drive in Oakville, Ontario. Surrounding property use is light industrial and commercial plazas.

On the basis of the findings of the Phase One ESA, a Phase Two ESA was subsequently conducted by Terrapex to investigate the environmental quality of soil and groundwater at and in the vicinity of the APECs identified at the Site. The Phase Two ESA consisted of the completion of eleven (11) boreholes to maximum depths of 6.1 and 9.3 metres below ground (m bg), installation of five groundwater monitoring wells, and the collection of soil and groundwater samples for laboratory analysis of contaminants of potential concern (COPCs) at the Site.

The current land use of the property is for commercial purposes as a retail fuel outlet and the proposed development of the Site is intended to continue to operate as a retail fuel outlet remaining a commercial property use. The generic full-depth Ministry of the Environment, Conservation and Parks (MECP) Site Condition Standards (SCS) applicable to industrial/commercial/community property use in a non-potable groundwater condition with medium and fine-textured soil (the "Table 3 SCS") was selected to evaluate soil and groundwater quality at the Site.

Based on field observations and an evaluation of soil and groundwater quality data, the following conclusions are provided:

- Based on the findings of the Phase Two ESA work program, the Site is generally surfaced with a 100 mm to 200 mm layer of asphalt, or up to 400 mm of topsoil, underlain by fill material consisting of sand and gravel to depths ranging from 0.7 m bg to 1.5 m bg. The fill materials are underlain by a deposit of native reddish-brown silty clay with trace sand and gravel varying to depths of 1.7 m bg to 2.9 m bg, overlying shale bedrock. The boreholes, with the exception of borehole BH204, were terminated within the red shale bedrock at depths between 6.1 m to 9.3 m bg, which represents the maximum depths of investigation. Borehole BH204 was drilled to a depth of 0.6 m bg. No deleterious material was observed in samples of fill collected during drilling. No aquitards were encountered during the intrusive investigations.
- Five groundwater monitoring wells were installed during the drilling activities between January 15 and January 19, 2024. One groundwater monitoring event was conducted at the Site February 8, 2024 that included all five of the monitoring wells. The depth to groundwater was identified between 3.15 m and 3.68 m bg during that monitoring event.
- The findings of the February 8, 2024 monitoring event indicated that the groundwater flow is towards the southeast. This finding is consistent with the results of previous monitoring events.
- No evidence of non-aqueous phase liquids (i.e., NAPL) or free-product was encountered during monitoring, purging, or sampling of the monitoring wells.
- Comparison of the laboratory results to the Table 3 SCS did not identify any soil contaminants at the Site.
- Comparison of the laboratory results to the Table 3 SCS did not identify any groundwater contaminants at the Site.

As the Phase Two ESA was completed to satisfy the Town of Oakville planning and development requirements and will not be used for a filing of an RSC at the Site, further investigation is not warranted at this time for the purpose of proceeding with industrial/commercial development of the Site.

2.0 INTRODUCTION

Terrapex was retained by Suncor Energy Products Partnerships to complete a Phase Two Environmental Site Assessment (ESA) of 845 Burloak Drive in Oakville, Ontario (the "Site" or "Phase Two Property").

The objective of the Phase Two ESA was to assess the areas of potential environmental concern (APECs) identified by a Phase One ESA (Terrapex, 2024).

It is understood that the Phase Two ESA documented herein was undertaken as part of the municipal planning development application process that requires environmental investigations to be completed in accordance with Ontario Regulation (O. Reg.) 153/04 under the Environmental Protection Act, *Records of Site Condition - Part XV.1 of the Act*. It is noted that a Record of Site Condition (RSC) will not be filed for the Site as a change to a more sensitive land use is not required.

2.1 SITE DESCRIPTION

The Site is irregular in shape, comprising an approximate area of 0.546 ha (5,461 m²). The Site is located on the southeast corner of the intersection of Burloak Drive and Wyecroft Road at 845 Burloak Drive in Oakville, Ontario. Surrounding property use is light industrial and commercial plazas.

Information regarding the property identification number (PIN) and legal property description for the Site are listed below.

PHASE ONE PROPERTY INFORMATION

Address:	845 Burloak Drive, Oakville, ON. L6L 6V9
Property Identification Number:	24858-0250 (LT)
Legal Description:	PART LOT 35, CON 3 TRAF SDS, PART 1 20R19151 TOGETHER WITH AN EASEMENT OVER PART 1 20R17292 AS IN HR601287 SUBJECT TO AN EASEMENT IN GROSS OVER PART 1 HR1782705 AS IN HR1782705 TOWN OF OAKVILLE
UTM Coordinates (centre of site, NAD83):	17T East: 601123.65 m North: 4805139.61 m
Site Area:	5,461 m^2
Structures:	Convenience store; carwash; UST tank nest; carwash interceptor; pump islands; garbage enclosure; sign (2)
Occupants (current):	Petro-Canada retail fuel outlet
Other facilities of note:	N/A

The Site is located in a neighbourhood comprised of light industrial and commercial uses as shown on Figure 1 (Site Location Plan) and Figure 2 (General Site Layout).

A plan of survey for the Site is provided in Appendix I.

2.2 PROPERTY OWNERSHIP

Contact information for the registered owner of the Site and the party authorizing this Phase Two ESA is provided in the table below.

Name and Address of Registered Owner:	Suncor Energy Products Partnership 3275 Rebecca Street Oakville, Ontario L6L 6N5
Name and Address of Authorizing Party:	Donna Wojtanowski 3275 Rebecca Street Oakville, Ontario L6L 6N5

2.3 CURRENT AND PROPOSED FUTURE USES

The current use of the Site is for commercial purposes as a retail fuel outlet and is considered an enhanced investigation property per the definitions of the Ontario *Records of Site Condition – Part XV.1 of the Act* regulation (O. Reg. 153/04). It is understood the Site proposes continue use as a commercial property and will continue to operate as retail fuel outlet.

2.4 APPLICABLE SITE CONDITION STANDARDS

Generic Site Condition Standards for evaluating laboratory analytical results for soil and groundwater were determined on the basis of Site-specific criteria specified in O. Reg. 153/04, and are summarized below:

- the Site is not within or adjacent to an area of natural significance as defined within Section 1 (1) of O. Reg. 153/04, does not include any land within 30 m of an area of natural significance, and is not otherwise considered “potentially sensitive”;
- the pH determined for “surface” soil samples (representative of depths not exceeding 1.5 m below ground surface, excluding any surface treatment) analysed as part of this Phase Two ESA ranged from 7.28 to 7.95, which is between the prescribed values of 5 to 9 for the application of generic Site Condition Standards;
- the pH determined for “subsurface” soil samples (representative of depths greater than 1.5 m below ground surface, excluding any surface treatment) analysed as part of this

Phase Two ESA ranged from 8.36 to 8.43, which is between the prescribed values of 5 to 11 for the application of generic Site Condition Standards;

- more than 2 m of overburden was observed over at least two-thirds of the area of the Site;
- the Site does not include a waterbody and is not located within 30 m of a waterbody;
- stratified site conditions will not be used when evaluating laboratory analytical results;
- current use of the Site is considered to be commercial;
- proposed future use of the Site is expected to be commercial and the proposed grading is anticipated not to vary from the existing grade;
- potable water at the Site, and all other properties located (in whole or in part) within 250 m of the Site, is supplied by a municipal drinking water system (as defined in the *Safe Drinking Water Act, 2002*);
- the Site, and no other property located (in whole or in part) within 250 m of the Site has a well that is used or intended for use as a source of water for human consumption or for agriculture;
- the Site is not located in an area designated in a municipal Official Plan as a well-head protection area, or another designation by the municipality intended for the protection of groundwater; and,
- soil texture at the Site has been classified as 'medium and fine textured" based on the result of grain size analysis conducted for five representative soil samples.

Based on the above, Full Depth Generic Site Condition Standards applicable to industrial, commercial, or community property use that are listed in Table 3 of the April 15, 2011 MECP *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document (hereafter referenced as the MECP Table 3 SCS) are considered appropriate for evaluating laboratory analytical results.

In accordance with the requirements of Section 35 of O. Reg. 153/04, notification of the intent to use standards corresponding to a non-potable groundwater condition was provided to the Clerk of the Region of Halton on March 8, 2024 of the intent to use standards corresponding to a non-potable groundwater condition. To date, the Region of Halton has not responded to the proposed use of non-potable standards at the Site. A copy of the notification correspondence is provided in Appendix II.

3.0 BACKGROUND INFORMATION

3.1 PHYSICAL SETTING

3.1.1 Water Bodies & Areas Of Natural Significance

Based on the review of the aerial photographs, satellite images, and topographic maps completed as part of the previous Phase One ESA, the Site does not include, and is not adjacent to, or within 30 m of a water body, as defined in O. Reg. 153/04. The nearest identified watercourse is a small tributary of Bronte Creek located approximately 250m northeast of the Site.

3.1.2 Topography & Surface Water Drainage

Based on a previous review of Google Earth on-line images, the elevation at the Site slopes gently south towards a tributary of Bronte Creek, which flows southeast into Lake Ontario. The elevation of the Site is approximately 110 m above mean sea level (amsl).

A review of the 1:50,000 NTS Topographic map (based on information as of 1983) and the 1:10,000 OBM (based on a 2010 air photo) shows the Site is located in a commercial development area of Burlington/Oakville. Based on Google Earth on-line information cross referenced with the VuMap mapping application, the site has a grade difference of approximately 1 metre. The general topography of the area is generally sloped to the south towards Lake Ontario.

Storm water from the site (other than what infiltrates into the ground) is directed towards the municipal storm water sewer system through catch basins located on-Site and on adjacent roadways.

3.2 PAST INVESTIGATIONS

A summary of past environmental reports available for review is presented below.

Summary of Phase I ESA (Jacques Whitford Environment Limited, 2003)

A Phase I ESA of the Site was carried out by Jacques Whitford Environment Limited (JWEL) in May 2003 in accordance with the principles set out in Canadian Standards Association (CSA) Standard Z768-01, *Phase I Environmental Site Assessment*. It is understood that the ESA report is prepared for as due diligence prior to purchase.

The objective of the investigation was to identify actual and potential sources of contamination associated with the site arising from current and/or historical activities on the site and on properties within the Phase I study area in order to satisfy the following Phase I ESA general objectives set out by CSA Standard Z768-01:

- to develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One Property;
- to determine the need for a Phase II ESA; and,
- to provide a basis for carrying out any Phase II ESA required.

The Site is legally described as Part of Lot 35, Concession 3, South of Dundas Street, (Trafalgar), Town of Oakville, Regional Municipality of Halton, and encompasses an area of approximately 0.66 hectares (1.62 acres). The Site is currently zoned as C3A (Automotive fuel station with or without service facilities) and appears to be used as a crop field for agricultural purposes. A drainage ditch is located adjacent to the west property line, along Burloak Drive. Surface drainage appears to be south and west to the drainage ditch running along the western property line (along the east side of Burloak Drive).

A review of a 1999 topographic map (based on 1996 aerial photographs) indicates that the Site and surrounding area is relatively flat. Regional drainage (anticipated groundwater flow direction) appears to be east/southeast towards a tributary of Sheldon Creek, located approximately 300 m from the Site.

Surrounding property use is commercial/industrial to the west (multi-tenant office/warehouse building), commercial (gasoline service station) to the northwest and undeveloped/agricultural surrounding.

The Site has been undeveloped and utilized as a crop field from as early as the 1960s to present (2003). The current registered owner of the Site is 1427814 Ontario Limited (Petro-Canada).

Following the completion of the preliminary records review, determined the following:

- The Esso gasoline service station with four associated USTs located approximately 40m northwest of the Site is not considered to be an environmental concern at this time based on the duration of time that the gasoline service station has operated (less than one year).
- The Site has been utilized as a crop field from as early as the 1960s.

Based on the review, evaluation, and interpretation of the information obtained from the records review, interviews, and site reconnaissance, revealed no evidence of environmental contamination in connection with the Site. No recommendations for further environmental investigations of the Site are deemed necessary.

Summary of Phase II ESA (Jacques Whitford Environment Limited, 2004)

An Environmental Subsurface Investigation (Phase II ESA) including intrusive investigations program was completed between December 22 and December 30, 2003 by Jacques Whitford Environment Limited (JWEL).

Between December 22 and 23, 2003, JWEL advanced eleven boreholes, three were completed as groundwater monitoring wells to depths ranging between 2.3 and 4.6 m bg.

Soil was analyzed for concentrations of BTEX, TPH (gas/diesel and heavy oil ranges), metals (including Chromium VI, Cyanide, Copper, Lead and Mercury), polycyclic aromatic hydrocarbons (PAHs), organochlorine pesticides, and atrazine herbicides.

Groundwater was analyzed for concentrations of BTEX and metals.

Soil and Groundwater quality in excess of the Ontario Ministry of the Environment's (MOE) Guideline for Use at Contaminated Sites in Ontario, Table B criteria for an industrial/commercial land use for a non-potable groundwater condition with medium to fine textured soils was not identified at the Site.

Summary of Phase I ESA (Terrapex Environmental Ltd., 2010)

A Phase I ESA of the Site was carried out by Terrapex Environmental Ltd. (Terrapex) in February 2010 in general accordance with the principles set out in Canadian Standards Association (CSA) Standard Z768-01, *Phase I Environmental Site Assessment*. It is understood that the ESA report is prepared as due diligence prior to severance of the surplus portion of the property for sale.

The objective of the project was to identify actual and/or potential sources of environmental liability the site associated with current and/or historical activities on the site and neighbouring properties. The scope of work comprised a review of available historic and current environmental information; an inspection of the site, and accessible neighbouring sites for evidence of potential environmental concerns; interviews and preparation of this report documenting the findings.

The site is located in the southeast corner of the intersection Burloak Drive/Wyecroft Road Road, in an area of predominantly commercial land use. At the time of the Phase I ESA the site consisted of a L-shaped vacant green space, which is bordered by a Petro Canada retail fuel outlet to the west. A recent Phase II ESA completed by Terrapex in December 2009 did not identify any evidence of petroleum hydrocarbon related impacts to soil and groundwater on the site.

Based on the findings of the Phase I ESA, the presence of the adjacent retail fuel outlet and the nearby refinery represent a potential for petroleum hydrocarbon impacts. However, the recently conducted Phase II ESA did not identify any petroleum hydrocarbon impacts to soil or groundwater exceeding the applicable Ontario Regulation 153/04 Table 2 Site Condition Standards. It is our opinion that the site currently meets the Ontario Regulation 153/04 Standards for commercial land use in a potable groundwater situation.

Summary of Phase II ESA (Terrapex Environmental Ltd., 2010)

A Phase II ESA including intrusive investigations program was completed between December 22, 2009 and February 25, 2010 by Terrapex Environmental Limited (Terrapex).

Terrapex, on December 22, 2010 advanced five boreholes completed as groundwater monitoring wells to depths ranging between 5.8 to 6.7 m bg. The stratigraphy at the site comprised surficial top soil to depths of approximately 0.1 m underlain by 1.5 m of silt and clay. The remainder of the boreholes were in native Queenston Shale to maximum depths of the boreholes.

Soil vapour concentrations ranged from 10 parts per million (ppm) to 110 ppm in all soil samples. Soil was analyzed for concentrations of BTEX, and PHCs F1-F4, and grain size analysis.

On January 11, 2010 the depth to groundwater ranged from 2.56 m to 3.82 m bg. Groundwater was analyzed for concentrations of BTEX and PHCs.

Halton Region objected to the use of non-potable standards at the Site citing that the area is “hydrogeologically sensitive.” Based on O.Reg 153/04, the Table 2 Site Conditions Standards (SCS) for use in a potable groundwater situation at commercial/industrial lands for medium to fine grained soil are applicable.

Concentrations of BTEX and PHCs were less than the applicable O.Reg 153/04 Table 2 SCS in all soil and groundwater samples.

4.0 SCOPE OF INVESTIGATION

4.1 OVERVIEW OF SITE INVESTIGATION

The scope of Terrapex's assessment comprised the following:

- preparing a Sampling and Analysis Plan that identified target sampling locations and associated rationale, a proposed laboratory analytical program, and the number and type of Quality Control (QC) samples;
- drilling eleven boreholes between January 15 through to January 19, 2024 to depths ranging between 5.8 and 9.3 m bg, five of which were completed as groundwater monitoring wells;
- collecting soil samples and logging of visual, olfactory and tactile soil characteristics;
- measuring total organic vapour (TOV) and/or soil vapour (SV) concentrations in soil;
- submitting selected soil and groundwater samples for laboratory analyses;
- surveying the elevation of each monitoring well relative to a temporary benchmark;
- monitoring groundwater conditions within each monitoring well;
- evaluating laboratory analytical results with respect to the selected SCS; and,
- refining the existing Conceptual Site Model (developed during the previous Terrapex Phase One ESA) to reflect the information collected during the Phase Two ESA activities.

The Sampling and Analysis Plan is provided in Appendix III. The sampling procedures are documented in detail in Section 5.0.

4.2 MEDIA INVESTIGATED

Based on the Phase One ESA findings, the Phase Two ESA work program documented herein included investigation of the environmental quality of both soil and groundwater at the Site. The environmental quality of sediment was not investigated as sediment is not present at the Site.

Soil and groundwater were investigated by drilling boreholes, installing monitoring wells, and groundwater sampling, as described above, and in Section 5.0.

4.3 PHASE ONE CONCEPTUAL SITE MODEL

The Phase One Conceptual Site Model (CSM) presented in the Phase One ESA report (Terrapex, 2024) includes figures and narrative that provided the logical basis for the interpretation of PCAs and APECs on the Phase Two Property. A summary of the CSM is provided in the sections below.

4.3.1 CONCEPTUAL SITE MODEL FIGURES

The Phase One CSM includes the following figures appended to this report:

PHASE ONE CSM FIGURES

Requisite Feature	Figure
i. Show any existing buildings and structures,	Figure 1: Site Location
ii. Identify and locate water bodies located in whole or in part in the Phase One Study Area,	Figure 3: Conceptual Site Model – Phase One Study Area
iii. Identify and locate any areas of natural significance located in whole or in part on the Phase One Study Area,	None identified.
iv. Locate any drinking water wells at the Phase One Property	None identified.
v. Show roads, including names, within the Phase One Study Area,	Figure 3: Conceptual Site Model – Phase One Study Area
vi. Show uses of properties adjacent to the Phase One Property,	Figure 3: Conceptual Site Model – Phase One Study Area
vii. Identify and locate areas where any potentially contaminating activity has occurred, and show tanks in such areas,	Figure 4: Conceptual Site Model – Potentially Contaminating Activities
viii. Identify and locate any areas of potential environmental concern.	Figure 5: Conceptual Site Model – Areas of Potential Environmental Concern

4.3.2 CONCEPTUAL SITE MODEL NARRATIVE

The Phase One CSM comprises the narrative provided in the following table:

PHASE ONE CSM NARRATIVE

Requisite Component	Description & Assessment			
i. Areas where potentially contaminating activity on, or potentially affecting the Phase One Property has occurred,	APEC #	PCA #	Description	Location
	1	1	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site
	2	2	55 – Transformer manufacturing, processing, and use	On-Site
	3	3	30 – Importation of Fill Material of Unknown Quality	On-Site
	4	4	28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site

Requisite Component	Description & Assessment	
	Please refer to Table 3 “Areas of Potential Environmental Concern” appended.	
ii. Any contaminants of potential concern,	List COPCs Benzene Toluene Ethylbenzene Xylenes PHC F1-F4 PAHs Metals PCBs Please refer to Table 3 “Areas of Potential Environmental Concern” appended.	
iii. The potential for underground utilities, if present, to affect contaminant distribution and transport,	In general, potential migration pathways for subsurface contaminants at the Site would consist of buried services or remnants of former buried services. However, no such pathways have been identified during the study.	
iv. Available regional or site specific geological and hydrogeological information, and	Site & Regional Topography:	The Site is generally flat. No major topographic features are mapped on the Site. The Phase One Study Area generally slopes to the south towards the Bronte Creek, which flows southeast towards Lake Ontario.
	Approximate Elevation:	The elevation of the Site is approximately 110 m amsl
	Physiography and Soil Stratigraphy:	The Site is located in a physiographic region known as the Iroquois Plain, conditions varying from sandy soils, underlain by clay to the flat lake plain with bedrock at shallow depths.
	Bedrock and Approximate Depth:	Upper Ordovician shale, limestone, dolostone, and siltstone of the Queenston Formation at approximately 2.0 m bg.
	Surface Water:	None within, or within 30 m of, the Phase One Property. The nearest water body is a tributary of Bronte Creek situated 250 m to the northeast of the Site. This water body ultimately discharges into Lake Ontario, a known regional groundwater discharge zone.
	Area of Natural Significance:	None located within the Phase One Property, or within the Phase One Study Area.
	Wellhead Protection Area:	None located within the Phase One Property, or within the Phase One Study Area.
	Municipal Drinking Water System	All properties are deemed to be connected to the municipal drinking water system supplied by the City of Burlington and Town of Oakville.
	Well For Consumption/ Agricultural Use:	None currently or previously located within the Site, or within the Phase One Study Area.

Requisite Component	Description & Assessment
v. How uncertainty or absence of information obtained in each of the components of the Phase One ESA could affect the validity of the model.	The main uncertainty associated with the CSM developed for the Site relates to the limited information regarding the former use of the Site as well as the limited information regarding activities on neighbouring properties. This lack of information is mitigated by the inherent nature of residential land uses, with are not typically associated with significant PCAs. Notwithstanding the above, it should be noted that Phase One ESAs have inherent limitations, and therefore findings cannot be considered definitive (i.e., the findings of a Phase One ESA are inherently associated with some uncertainty).

4.3.3 EXEMPTIONS FOR DE-ICING AGENTS, EXCESS SOIL, AND DRINKING WATER

The following table describes the rationale pertaining to any applicable reliance on exemptions provided by Paragraphs 1, 1.1 and 2 of Section 49.1 of O. Reg. 153/04.

RELIANCE ON EXEMPTIONS

Exemption(s) Circumstances	Rationale
(1.) Substance(s) applied to surfaces for safety of vehicular or pedestrian traffic under conditions of snow or ice or both.	Nor relied upon.
(1.1) Excess soil deposited at the property for final placement meets the soil quality standards that apply to the property as determined in accordance with the Excess Soil Standards.	Not relied upon.
(2.) There has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002.	Not relied upon.

4.3.4 EXEMPTION RELATING TO NATURALLY OCCURRING CONCENTRATIONS

Paragraph 3 of Section 49.1 of O. Reg. 153/04 considers an applicable site condition standard as not exceeded if the concentrations do not exceed the naturally occurring range of concentrations typically found within the vicinity of the Site.

Paragraph 3 of Section 49.1 is not being relied upon.

4.4 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN

No deviations from the Sampling and Analysis Plan were encountered during the Phase Two ESA investigation with exception of collecting soil samples for vertical delineation wherever contaminants were identified. A copy of the Sampling and Analysis Plan is provided in Appendix III.

4.5 IMPEDIMENTS

Access to the Site was not impeded at any time during the Phase Two ESA work program, with the exception of underground services, such as water lines, gas service, and private hydro which are present in some areas of the Site.

5.0 INVESTIGATION METHOD

5.1 GENERAL

The soil and groundwater quality at the Site were investigated at the locations shown on Figures 2 and 5 through the advancement of boreholes and installation of groundwater monitoring wells to characterize environmental conditions at the APECs identified in the Phase One ESA. Investigation methods followed Standard Operating Procedures prepared by Terrapex for the conduct of environmental investigations.

5.2 DRILLING AND EXCAVATING

Borehole drilling and monitoring well installation services for this work program were provided by Geo-Environmental Drilling Inc. (GEDI) of Halton Hills, Ontario using a conventional CME 75 rotary auger drilling rig. GEDI is a MECP-licensed well drilling contractor.

Measures to minimize potential cross-contamination or other potential bias are described in Terrapex's Standard Operating Procedures (Appendix IV). There were no deviations from the Standard Operating Procedures regarding borehole drilling during this investigation.

5.3 SOIL

5.3.1 Soil Sampling

Borehole advancement conducted as part of the Phase Two ESA work program was completed under the full-time supervision of Terrapex staff. Soil samples were collected at each borehole location at regular depth intervals using a split spoon sampler for the conventional rotary auger drill rig.

Each recovered sample was divided into two portions. One portion was placed in a clear sampling bag for field screening/logging. The second portion was collected using laboratory supplied sampling containers for analysis of selected COPCs. Samples considered to be “worst-case” based on field screening were submitted for analysis and extracted at the laboratory within the required holding time. Soil descriptions were recorded based on the Unified Soil Classification System (USCS).

Samples for analysis were placed in a cooler with ice and delivered with signed chain of custody to the project laboratory for analysis.

Borehole locations are shown on Figures 2 and 5. Tabular borehole logs illustrating the stratigraphy encountered, chemical analysis samples and measured SV concentrations are included in Appendix V.

Measures to minimize potential cross-contamination or other potential bias are described in Terrapex's SOPs (Appendix IV).

5.3.2 Field Screening Measurements

Total Organic Vapour (TOV) and/or Soil Vapour (SV) concentrations were measured in each soil sample using a MiniRAE 2000 photoionization detector (PID) calibrated to isobutylene, and/or a RKI Eagle 2 Hydrocarbon Surveyor (Eagle) calibrated to *n*-hexane and operated in "methane elimination" mode. The PID can measure organic compounds to a nominal detection level of 0.1 parts per million by volume (ppm), with an accuracy of ±10%. The Eagle can measure combustible organic compounds to a nominal detection level of 5 ppm, with an accuracy of ±5%.

The PID and Eagle were calibrated according to the manufacturer's instructions and Terrapex Standard Operating Procedures before the field investigation.

"Worst-case" soil samples from each borehole were identified on the basis of vapour screening, visual and olfactory evidence of contamination, and sample location in relation to potential point sources of impact.

5.4 GROUNDWATER

5.4.1 Monitoring Well Installation

Monitoring well installation services for this work program were provided by GEDI, under contract with Terrapex. In order to facilitate monitoring well installation, the drill rigs were equipped with hollow stem augers.

Monitoring wells were installed in select boreholes, as shown on Figures 2 and 5. The monitoring wells were constructed using 50 mm inside diameter schedule 40 PVC well pipe and #10 slot screen interval. The annulus of each monitoring well was backfilled with washed silica sand to a depth of approximately 0.3 m above the screened interval. A hydrated bentonite seal was placed above the sand pack to prevent infiltration of surface water into the monitoring well. A flush-mount well casing was cemented in place over each monitoring well for protection. Well installation details are provided within the borehole logs in Appendix V.

The depths to the bottom of the screened intervals of the monitoring wells varied from 6.1 m bg to 7.0 m bg. The screened interval depths were established to assess the surface of the groundwater table for the potential on-Site and off-Site sources of contamination.

Measures to minimize potential cross-contamination or other potential bias are described in Terrapex's Standard Operating Procedures (Appendix IV). There were no deviations from the Sampling and Analysis Plan regarding the installation of the monitoring wells.

Prior to developing and sampling, the monitoring wells were monitored for combustible vapours in the well headspace, and depths to water and to the bottom were measured in each well. The estimated volume of water in each well and its annulus were calculated based on the depth measurements, diameter of the well standpipe and annulus, and an assumed annulus porosity of 30%.

The monitoring wells were the subsequently developed in accordance with Terrapex's SOPs in order to remove entrained particulate in the well standpipe, well screen and filter pack as well as surrounding formation materials. Development of each monitoring well was conducted with a dedicated inertial sampler comprising low density polyethylene (LDPE) tubing and a LDPE foot valve.

5.4.2 Field Measurements of Water Quality Parameters

Prior to conducting groundwater sampling activities, vapour levels were measured within the headspace of each monitoring using an PID and/or Eagle. The depth to groundwater and apparent thickness, if any, of any light non-aqueous phase liquids (LNAPL) were then measured using a Heron Instruments interface probe.

To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with potable water between each monitoring well. A fresh pair of nitrile gloves was worn at each well location.

Water quality parameters (i.e., temperature, pH, specific conductivity, dissolved oxygen, and oxidation reduction potential) were measured in monitoring wells prior to sampling activities using a flow-through cell and a YSI 556 water quality sensor, as detailed in the SOPs (Appendix IV).

5.4.3 Groundwater Sampling

Low flow sampling was conducted in order to minimize drawdown of the water table. After water quality parameters stabilized, groundwater samples from the monitoring wells were collected. Sampling was conducted using "low-flow" methodology using a peristaltic pump and dedicated sample tubing, as per Terrapex SOPs (Appendix IV).

Groundwater samples were collected directly into pre-cleaned, laboratory-supplied sampling bottles, packed in a cooler with ice, and shipped under signed chain of custody to AGAT Laboratories (AGAT) for laboratory analysis.

5.5 SEDIMENT

Sediment sampling was not completed as sediment is not present at the Site.

5.6 ANALYTICAL TESTING

Laboratory analytical services for this work program involving soil and groundwater media were provided by AGAT Laboratories (AGAT) in Mississauga, Ontario under contract with Terrapex. AGAT is accredited by Standards Council of Canada (SCC) to International Standard ISO/IEC 17025:2005, *General Requirements for the Competence of Testing and Calibration Laboratories*.

Soil and groundwater samples were analysed as per the sampling and analysis plan to address the identified APECs from the Phase One ESA.

5.7 RESIDUE MANAGEMENT

Soil cuttings and purged water generated during the work program were contained on-Site and disposed of at the GFL Environmental Inc. licensed waste facility located at 1070 Toy Avenue, Pickering, Ontario.

5.8 ELEVATION SURVEYING

Terrapex completed an elevation survey of the top of the pipe and ground surface for each monitoring well relative to a temporary (or geodetic) benchmark.

A TOPCON HiPer V Global Navigation Satellite System (GNSS) Receiver in metres above mean sea level (m amsl) was used.

5.9 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

Quality Assurance and Quality Control (QA/QC) measures were implemented during the Phase Two ESA in accordance with Terrapex Standard Operating Procedures. A summary of these measures follows.

During drilling, to mitigate cross-contamination, split spoons were cleaned after the collection of each sample. Fresh nitrile gloves were worn for the handling of each sample.

During groundwater sampling, dedicated sampling equipment was used at each monitoring well location. To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with potable water between each monitoring well. A fresh pair of nitrile gloves was donned at each well location.

Pre-cleaned groundwater sample containers for the specific parameters of interest were provided by the laboratory and used at each borehole and monitoring well location for the collection of soil and groundwater samples. Samples for analyses were placed in an enclosed cooler with loose ice and shipped under signed chain of custody and custody seals to AGAT for chemical analysis.

QA/QC samples collected as part of the Phase Two investigation program included the following:

- one blind field duplicate soil sample for analysis of BTEX and PHCs,
- one blind field duplicate soil sample for analysis of PAHs,
- one blind field duplicate soil sample for analysis of metals and/or inorganic parameters;
- one blind field duplicate groundwater samples for analysis of BTEX and PHCs, PAHs, and metals and inorganic parameters; and,
- one trip blank sample was submitted with the groundwater samples for analysis of BTEX and PHC F1.

With the exception of samples prepared by the laboratory, the laboratory was not informed of the nature or number of the field QA/QC samples outlined above.

6.0 REVIEW AND EVALUATION

6.1 GEOLOGY

The site is located in a physiographic region known as the Iroquois Plain. The Iroquois plain extends around the western part of Lake Ontario, from the Niagara River to Trent River. Conditions within the Iroquois plain vary greatly, from sandy soils, underlain by clay to the flat lake plain with bedrock at shallow depths.

Bedrock geology consists of Upper Ordovician shale, limestone, dolostone, and siltstone of the Queenston Formation. Bedrock was encountered during field investigations completed by Terrapex. Borehole logs indicate the bedrock elevation at the Site is approximately between 1.5 to 2.9 m bg.

A review of Google Earth on-line images identified the Site at an elevation of approximately 110 m above sea level. The topography at the Site slopes gently towards south.

Based on the findings of the Phase Two ESA work program, the Site is generally surfaced with a 100 mm to 200 mm layer of asphalt, or up to 400 mm of topsoil, underlain by fill material consisting of sand and gravel to depths ranging from 0.7 m bg to 1.5 m bg. The fill materials are underlain by a deposit of native reddish-brown silty clay with trace sand and gravel varying to depths of 1.7 m bg to 2.9 m bg, overlying shale bedrock. The boreholes, with the exception of borehole BH204, were terminated within the red shale bedrock at depths between 6.1 m to 9.3 m bg, which represents the maximum depths of investigation. Borehole BH204 was drilled to a depth of 0.6 m bg. No deleterious material was observed in samples of fill collected during drilling. No aquitards were encountered during the intrusive investigations. As no contaminants were identified in the shallow overburden aquifer, deeper aquifers were not investigated.

The general soil stratigraphy at the Site is shown on the borehole logs in Appendix V.

6.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

Five groundwater monitoring wells were installed at the Site between January 15, and January 19, 2024. The monitoring wells were screened between 3.1 and 6.1 m bg at MW210, MW209, MW208 and MW206. At MW205, the monitoring well is screened between 4.0 and 7.0 m bg.

Groundwater monitoring event was conducted at the Site on February 8, 2024 that included all five of the monitoring wells. The depth to groundwater was identified between 3.15 m bg at MW210 and 3.68 m bg at MW208 during that monitoring event.

The findings of the February 8, 2024 monitoring event indicated that the groundwater flow is towards the southeast. This finding is generally consistent with the results of previous

investigations. The groundwater monitoring data is summarised in Table 1 and the interpreted groundwater elevation contours are shown on Figure 6.

Free-product or non-aqueous phase liquid (NAPL) was not encountered during monitoring, purging, or sampling of the monitoring wells during the Phase Two ESA work programs.

6.3 GROUNDWATER HYDRAULIC GRADIENTS AND CONDUCTIVITY

Based on the relative groundwater elevations on February 8, 2024, the interpreted horizontal gradient was calculated as approximately 0.0136 m/m.

Vertical hydraulic gradients were not calculated as no potential contaminant concentration greater than applicable SCS was identified during the Phase Two ESA.

Based on the fine to medium soil textured soil and bedrock at the Site, the hydraulic conductivity for the unconsolidated glacial silt till and shale bedrock was estimated to range from 10^{-6} to 10^{-13} m/sec (Freeze and Cherry, 1979).

6.4 SOIL TEXTURE

The soil texture was determined to be medium to fine textured per the definitions of O. Reg. 153/04, based on field observations and grain-size analysis. Five soil samples, which were representative of at least 1/3 of soil on Site were submitted for grain size (+/- 75 µm) analysis.

6.5 SOIL FIELD SCREENING

The conceptual site model developed during the Phase One ESA suggests that potential soil impacts associated with fill materials could be associated with the presence of fill materials themselves. Given that such impacts are associated with the inherent environmental quality of the fill materials, soil field screening for assessment of the environmental quality of fills was generally geared to identifying the presence/absence of fill materials, and identifying samples of fill containing debris (wood, brick, concrete, and similar materials) that would be particularly suggestive of poor-quality fill materials.

In addition, potential impacts associated with spills, leaks, or other releases were screened by measuring TOV and/or SV concentrations in the headspace of the portion of recovered soil samples. The soil samples were placed in sealable sample bags for further site characterization (i.e., the portion not placed directly into sampling containers for possible laboratory analyses).

During the Phase Two ESA, SV concentrations were measured for each soil sample recovered from each the boreholes using an Eagle II RKI. CSV concentrations ranged from less than 5 parts per million (ppm) to 45 ppm.

The SV concentrations measured for each soil sample are included on the borehole logs (Appendix V).

6.6 SOIL QUALITY

Laboratory results for the soil samples submitted for analyses of BTEX, PHCs, PAHs, PCBs metals and inorganics are summarized in Tables 2 through 5, respectively.

As indicated in the tables, concentrations of all parameters in the soil samples were less than the applicable Table 3 SCS.

Soil sampling results depicted as plan views are presented in Figures 7 through 10.

Copies of the Laboratory Certificates of Analyses are attached in Appendix VI.

6.7 GROUNDWATER QUALITY

Laboratory results for the groundwater samples submitted for analyses of BTEX and PHCs, PAHs, metals and inorganics, are summarized in Tables 6 through 8, respectively.

As indicated in the tables, concentrations of all parameters in the groundwater samples were less than the applicable Table 3 SCS.

Groundwater sampling results are depicted as plan views presented in Figures 11 through 13.

Copies of the Laboratory Certificates of Analyses are attached in Appendix VI.

6.8 SEDIMENT QUALITY

The environmental quality of sediment was not investigated as sediment is not present at the Site.

6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

AGAT's QA/QC program consisted of the analysis of laboratory replicates, method and spiked blanks, process percent recoveries, matrix spikes, and surrogate percent recoveries, as appropriate for the particular analysis protocol.

QA/QC Control Limits: A review of the quality assurance reports attached to the laboratory certificates of analyses indicate that the laboratory QA/QC samples were within the quality control limits.

Lab Duplicate Samples: Acceptable correlation was generally observed between the laboratory duplicate and its corresponding sampling pair for each of the tested parameters.

Matrix Spike Recoveries: No issues regarding matrix spike recoveries were outlined in any of the laboratory certificates of analysis.

Detection Limits: Detection limits generally did not require adjustment.

General Comments: Laboratory analysis generally did not deviated from standard protocol.

Field Duplicate Samples: Acceptable correlation for field duplicate sample results was observed between the duplicate sample and its corresponding sampling pair for each of the tested parameters.

Trip Blank Samples: A trip blank sample was submitted for analysis of BTEX/PHC F1 as part of the groundwater sampling event. Analytical results from the trip blank sample were all less than the detection limit.

Methanol Blank Samples: No methanol blank samples were submitted for analysis of BTEX/PHC F1 as part of the soil sampling events.

Trip Spike Sample: No trip spike samples were submitted for analysis of BTEX/PHC F1 as part of the groundwater sampling event.

Based on the above analysis of the QA/QC program, no concerns regarding the adequacy or representativeness of the sampling and analytical program were identified and, as a result, the decision-making was not affected, and the overall objectives of the investigation and the assessment were met.

6.10 PHASE TWO CONCEPTUAL SITE MODEL

A preliminary conceptual site model was developed as part of the Phase One ESA and is included in Section 4.3. As there is no intention to submit a RSC for the Site, a Phase Two CSM has not been included at this time.

7.0 CONCLUSIONS

Based on the findings of the Phase Two ESA, the environmental quality of soil and groundwater meets the Table 3 SCS. The findings of the Phase Two ESA are in general accordance with the requirements of O. Reg. 153/04.

As the Phase Two ESA was completed to satisfy the Town of Oakville planning and development requirements and will not be used for a filing of an RSC at the Site, further investigation is not warranted at this time for the purpose of proceeding with industrial/commercial development of the Site.

7.1 SIGNATURES

This report has been completed in accordance with the terms of reference for this project as agreed upon by Suncor Energy Products Partnership (Suncor) and Terrapex Environmental Ltd. (Terrapex) and generally accepted engineering or environmental consulting practices in this area. The objectives and requirements set out in Schedule E of O. Reg. 153/04 have been applied in carrying out this environmental site assessment.

The reported information is believed to provide a reasonable representation of the general environmental conditions at the site; however, studies of this nature have inherent limitations. The data were collected at specific locations and conditions may vary at other locations, or with the passage of time. The assessment was also limited to a study of those chemical parameters specifically addressed in this report.

Terrapex has relied in good faith on information and representations obtained from the Client and third parties and, except where specifically identified, has made no attempt to verify such information. Terrapex accepts no responsibility for any deficiency or inaccuracy in this report as a result of any misstatement, omission, misrepresentation, or fraudulent act of those providing information. Terrapex shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time of the study.

This report has been prepared for the sole use of Suncor Energy Products Partnership. Terrapex accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Suncor Energy Products Partnership.

Respectfully submitted,
TERRAPEX ENVIRONMENTAL LTD.

Geoff Lussier, Dipl.
Senior Project Manager

Jeff Stevenson, PGeo., QPesa
Senior Project Manager

Olivia Claxton, BES
Environmental Scientist

8.0 REFERENCES

Groundwater. Prentice-Hall Canada Inc., Toronto. Freeze, Allan R. and Cherry, John A., 1979.

Ontario Regulation 153/04, Records of Site Condition – Part XV.1 of the Act. Ontario Ministry of the Environment. July 1, 2011.

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Phase I Environmental Site Assessment, Historical Review and Site Visit, Undeveloped Lot – Southeast corner of Burloak Drive and South Service Road, Oakville, Ontario. Jacques Whitford Environment Limited. May 15, 2003.

Phase II Environmental Subsurface Investigation Report, 845 Burloak Drive (at South Service Road) in the Town of Oakville, Ontario. Jacques Whitford Environment Limited. February 4, 2004.

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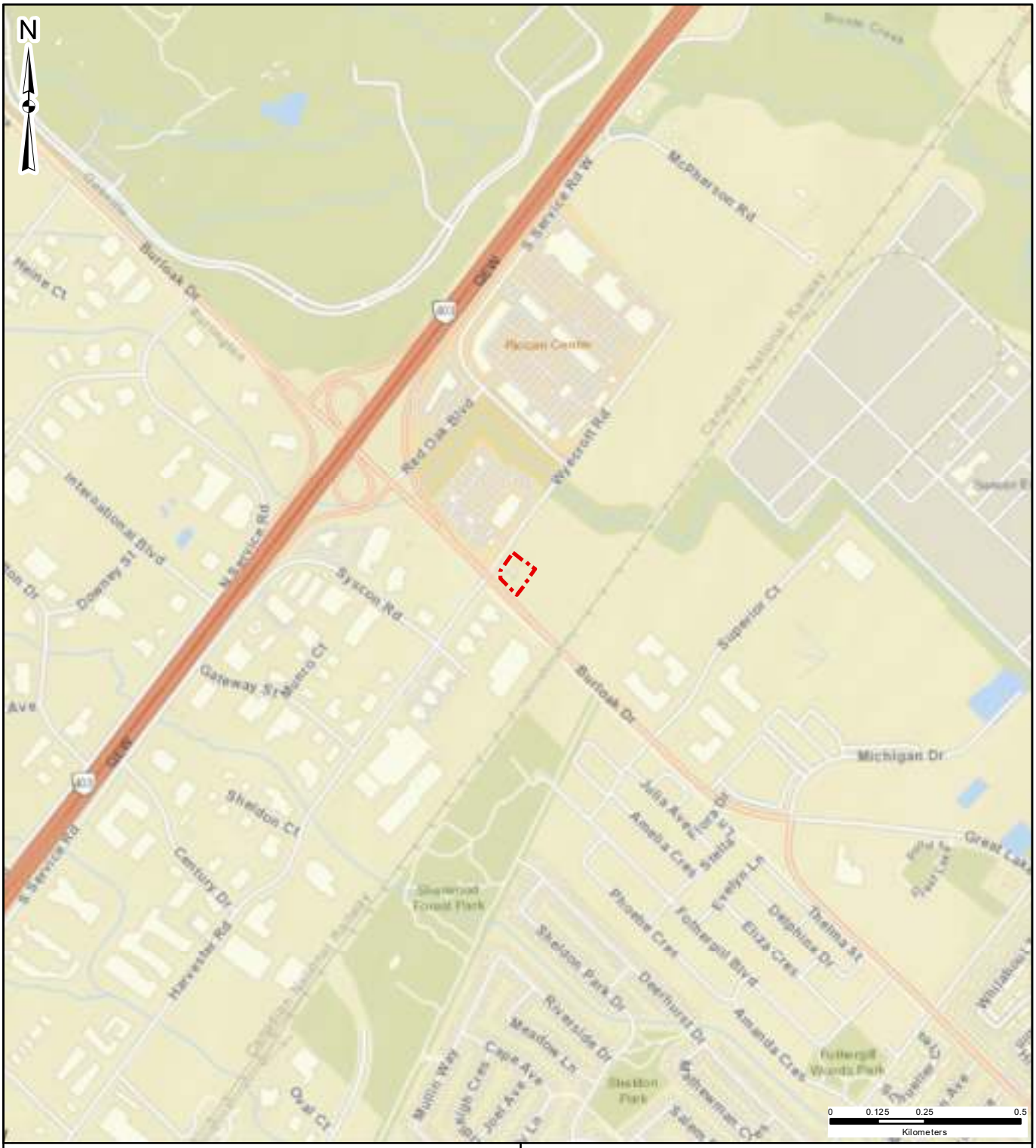
Phase II Environmental Site Assessment, 845 Burloak Drive, Oakville, Ontario. Terrapex Environmental Ltd. March 2, 2010.

FIGURES



LEGEND

SITE BOUNDARY

DATA SOURCE: ESRI
MAP PROJECTION: NAD 1983 UTM Zone 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
SITE LOCATION

DRAWN BY: JS	PROJECT NO.: CT3959.01	CHECKED BY: GLL
REVISION: 00	DATE: FEBRUARY 2024	**FIGURE: 1**

jserroul C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 1 SITE LOCATION.mxd

LEGEND

- SITE BOUNDARY
- BOREHOLE
- MONITORING WELL

0 10 20 30
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE:
GENERAL SITE LAYOUT

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	SJS
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: **2**

C:\Users\JSerrouel\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 2 GENERAL SITE LAYOUT.mxd

LEGEND

- SITE BOUNDARY
- STUDY AREA
- MECP WATER WELL RECORDS
- CANADIAN NATIONAL RAILWAY

0 50 100 150
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE OAKVILLE, ONTARIO

TERRAPEX

TITLE: **PHASE ONE STUDY AREA AND SURROUNDING LAND USES**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GLL
REVISION:	DATE:	FIGURE:
00	FEBRUARY 2024	**3**

C:\Users\s.finlay\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 3 STUDY AREA.mxd

C:\Users\s.finlay\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 4 CSM - PCAs.mxd

LEGEND

- SITE BOUNDARY
- STUDY AREA

POTENTIALLY CONTAMINATING ACTIVITIES

- ON-SITE PCA LEADING TO APEC
- OFF-SITE PCA LEADING TO APEC
- OFF-SITE PCA NOT LEADING TO APEC

POTENTIALLY CONTAMINATING ACTIVITY TYPES

28. GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS

30. IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY

33. METAL TREATMENT, COATING, PLATING AND FINISHING

34. METAL FABRICATION

43. PLASTICS (INCLUDING FIBREGLASS) MANUFACTURING AND PROCESSING

46. RAIL YARDS, TRACKS AND SPURS

54. TEXTILE MANUFACTURING AND PROCESSING

55. TRANSFORMER MANUFACTURING, PROCESSING AND USE

57. VEHICLES AND ASSOCIATED PARTS MANUFACTURING

OT1. OTHER - SPILL

NOTE:

● PCA ID (PCA TYPE)

REFER TO THE REPORT FOR ADDITIONAL DETAILS.

0 50 100 150 200
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

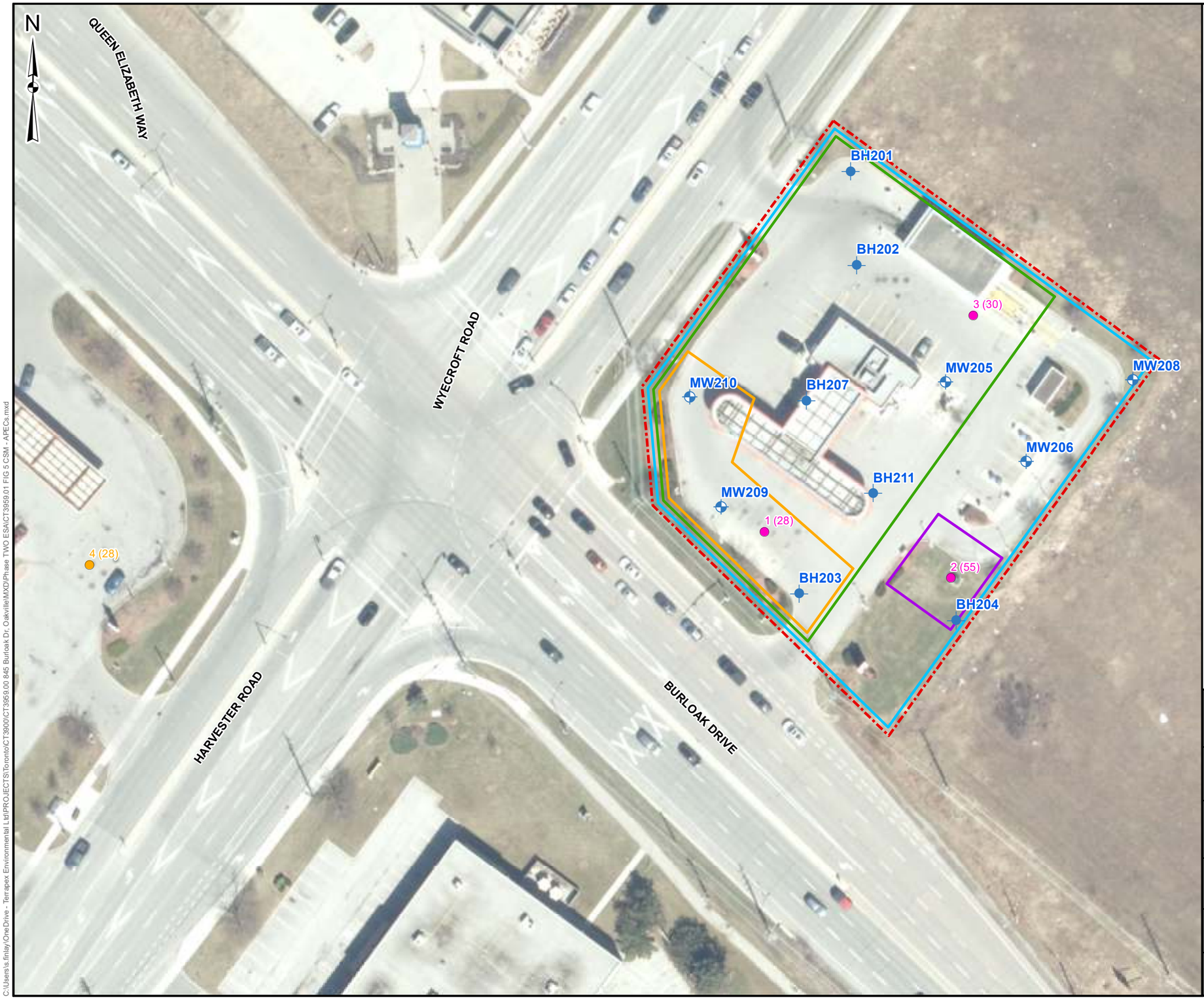
CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE: **CONCEPTUAL SITE MODEL AND POTENITALLY CONTAMINATING ACTIVITIES**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
XX	CT3959.01	GLL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**4**



C:\Users\s.finlay\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 5 CSM - APECs.mxd

LEGEND

- BOREHOLE
- MONITORING WELL

POTENTIALLY CONTAMINATING ACTIVITIES

- ON-SITE PCA LEADING TO APEC
- OFF-SITE PCA LEADING TO APEC

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

- APEC-1
- APEC-2
- APEC-3 (ENTIRE PROPERTY)
- APEC-4

APEC	PCA ID	PCA TYPE	DESCRIPTION
1	1	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
2	2	55	TRANSFORMER MANUFACTURING, PROCESSING AND USE
3	3	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
4	4	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS

0 10 20 30
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE: **CONCEPTUAL SITE MODEL - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
SF	CT3959.01	GLL
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: **5**

LEGEND

- SITE BOUNDARY
- MONITORING WELL
- INTERPRETED GROUNDWATER CONTOURS
- GROUNDWATER FLOW DIRECTION

0 10 20 30
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION:
845 BURLOAK DRIVE
OAKVILLE, ONTARIO

TERRAPEX

TITLE: **INTERPRETED GROUNDWATER CONTOURS (AS OF FEBRUARY 8, 2024)**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	SJS
REVISION:	DATE:	FIGURE:
00	FEBRUARY 2024	6

C:\Users\JSerrouit\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 6 GW FLOW.mxd

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 7 SOIL ANALYTICAL RESULTS_PHCs.mxd

LEGEND

- SITE BOUNDARY
- BOREHOLE
- MONITORING WELL

ANALYTICAL INFORMATION

- LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE OAKVILLE, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS - BTEX/PHCS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**7**

LEGEND

- SITE BOUNDARY
- BOREHOLE
- MONITORING WELL

ANALYTICAL INFORMATION

- LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE, OAKVILLE, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS - PAHS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**8**

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 8 SOIL ANALYTICAL RESULTS_PAHs.mxd

LEGEND

- SITE BOUNDARY
- BOREHOLE
- MONITORING WELL

ANALYSIS INFORMATION

- LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE, OAKVILLE, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS - METALS AND INORGANICS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**9**

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 9 SOIL ANALYTICAL RESULTS_M_L.mxd

LEGEND

- SITE BOUNDARY
- BOREHOLE
- MONITORING WELL

ANALYSIS INFORMATION

- LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE, OAKVILLE, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS - PCBS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	DATE:	FIGURE:
00	FEBRUARY 2024	**10**

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 10 SOIL ANALYTICAL RESULTS_PCBs.mxd

LEGEND

- SITE BOUNDARY
- MONITORING WELL

ANALTYICAL INFORMATION

- LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR ALL TYPES OF PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
2. SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE OAKVILLE, ONTARIO

TERRAPEX

TITLE: **GROUNDWATER ANALYTICAL RESULTS - BTEX/PHCS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**11**

C:\Users\JSerrouil\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 11 GW ANALYTICAL RESULTS_PHCs.mxd

LEGEND

SITE BOUNDARY

MONITORING WELL

ANALTYICAL INFORMATION

LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR ALL TYPES OF PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
2. SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE OAKVILLE, ONTARIO

TERRAPEX

TITLE: **GROUNDWATER ANALYTICAL RESULTS - PAHS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**12**

C:\Users\JSerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3960\CT3959.00 845 Burloak Dr, Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 12 GW ANALYTICAL RESULTS_PAHs.mxd

LEGEND

SITE BOUNDARY

MONITORING WELL

ANALYTICAL INFORMATION

LESS THAN OR EQUAL TO TABLE 3 SCS

STANDARD INFORMATION

MECP TABLE 3: FULL DEPTH GENERIC SCS IN A NON-POTABLE GROUND WATER CONDITION FOR ALL TYPES OF PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

NOTES

1. ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
2. SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20

Metres

DATA SOURCE: TOWN OF OAKVILLE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT: SUNCOR ENERGY

SITE LOCATION: 845 BURLOAK DRIVE OAKVILLE, ONTARIO

TERRAPEX

TITLE: **GROUNDWATER ANALYTICAL RESULTS - METALS AND INORGANICS**

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CT3959.01	GL
REVISION:	**DATE:**	**FIGURE:**
00	FEBRUARY 2024	**13**

C:\Users\JSerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3900\CT3959.00 845 Burloak Dr. Oakville\MXD\Phase TWO ESA\CT3959.01 FIG 13 GW ANALYTICAL RESULTS_MI.mxd

TABLES

TABLE 1: GROUNDWATER MONITORING DATA
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

WELL ID	WELL CONSTRUCTION				WELL MONITORING DATA					
	GROUND ELEVATION[1] (m)	T.O.P. ELEVATION[2] (m)	SCREEN LENGTH (m)	BOTTOM OF SCREEN[3] (m)	DATE	CV[4]	DEPTH TO WATER FROM T.O.P. (m)	DEPTH TO WATER FROM GROUND (m)	GROUNDWATER ELEVATION[5] (m)	LNAPL THICKNESS[6] (m)
MW205	108.66	108.54	3.0	7.0	08-Feb-24	<5ppm	3.17	3.29	105.37	None
MW206	108.41	108.31	3.0	6.1	08-Feb-24	<5ppm	3.17	3.26	105.14	None
MW208	108.49	108.37	3.0	6.1	08-Feb-24	<5ppm	3.56	3.68	104.81	None
MW209	108.72	108.65	3.0	6.1	08-Feb-24	<5ppm	3.46	3.53	105.19	None
MW210	108.99	108.90	3.0	6.1	08-Feb-24	<5ppm	3.07	3.15	105.83	None

NOTES

1 Elevation of ground surface at well location, relative to site benchmark
2 Elevation of highest point of well pipe ("top of pipe"), relative to site benchmark
3 Elevation of bottom of well screened interval, relative to site benchmark
4 Combustible vapour concentration in well headspace in parts per million by volume (ppm) or percent of lower explosive limit (%LEL)
5 Static water level elevation, relatve to site benchmark
6 Measured thickness of light, non-aqueous phase liquid, if any

TABLE 2: SOIL ANALYTICAL RESULTS - BTEX AND PHCs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 I/C/C fine/medium	BH201-7	BH202-6	BH203-6	MW205-5	MW205-7	MW206-6	MW1000-6 Field Duplicate of MW206-6	RPD	BH207-5
Vapour Reading	see note	-	<5 ppm	<5 ppm	45 ppm	<5 ppm	45 ppm	<5 ppm	<5 ppm		<5 ppm
Sample Depth	m bg	-	4.6 - 5.3	4.6 - 5.0	6.1 - 6.6	3.0 - 3.2	6.1 - 6.4	3.8 - 4.1	3.8 - 4.1		3.0 - 3.4
Sampling Date	dd-mmm-yy	-	15-Jan-24	16-Jan-24	16-Jan-24	17-Jan-24	17-Jan-24	18-Jan-24	17-Jan-24		18-Jan-24
Analysis Date (on or before)	dd-mmm-yy	-	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24		27-Jan-24
Certificate of Analysis No.	-	-	24T111689	24T111689	24T111689	24T111689	24T111689	24T111689	24T111689		24T111689
BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (BTEX)											
Benzene	ug/g	0.40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02
Toluene	ug/g	78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Ethylbenzene	ug/g	19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Xylenes (Total)	ug/g	30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
PETROLEUM HYDROCARBONS (PHCs)											
Petroleum Hydrocarbons F1[1]	ug/g	65	<5	<5	<5	<5	<5	<5	<5	-	<5
Petroleum Hydrocarbons F2	ug/g	250	<10	<10	<10	<10	<10	<10	<10	-	<10
Petroleum Hydrocarbons F3	ug/g	2,500	<50	<50	<50	<50	<50	<50	<50	-	<50
Petroleum Hydrocarbons F4	ug/g	6,600	<50	<50	<50	<50	<50	<50	<50	-	<50
Petroleum Hydrocarbons F4G	ug/g	6,600	NA	NA	NA	NA	NA	NA	NA	-	NA

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Industrial/Commercial/Community Property-Use, Fine- to Medium-Textured Soil

-	Not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	F1 fraction does not include BTEX

TABLE 2: SOIL ANALYTICAL RESULTS - BTEX AND PHCs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 I/C/C fine/medium	MW208-7	MW209-5	MW210-6	BH211-5
Vapour Reading	see note	-	<5 ppm	<5 ppm	<5 ppm	<5 ppm
Sample Depth	m bg	-	5.3 - 5.5	3.0 - 3.2	3.8 - 4.0	3.0 - 3.4
Sampling Date	dd-mmm-yy	-	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24
Analysis Date (on or before)	dd-mmm-yy	-	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24
Certificate of Analysis No.	-	-	24T111689	24T111689	24T111689	24T111689
BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (BTEX)						
Benzene	ug/g	0.40	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	78	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	19	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	30	<0.05	<0.05	<0.05	<0.05
PETROLEUM HYDROCARBONS (PHCs)						
Petroleum Hydrocarbons F1[1]	ug/g	65	<5	<5	<5	<5
Petroleum Hydrocarbons F2	ug/g	250	<10	<10	<10	<10
Petroleum Hydrocarbons F3	ug/g	2,500	<50	<50	<50	<50
Petroleum Hydrocarbons F4	ug/g	6,600	<50	<50	<50	<50
Petroleum Hydrocarbons F4G	ug/g	6,600	NA	NA	NA	NA

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Industrial/Commercial/Community Property-Use, Fine- to Medium-Textured Soil

-	Not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	F1 fraction does not include BTEX

TABLE 3: SOIL ANALYTICAL RESULTS - PAHs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 I/C/C fine/medium	BH202-3	MW205-2	MW208-3	MW209-1	MW9000-1 Field Duplicate of MW209-1	RPD	MW210-2
Vapour Reading	see note	-	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm		<5 ppm
Sample Depth	m bg	-	1.8 - 2.4	0.8 - 1.4	1.5 - 2.1	0.0 - 0.2	0.0 - 0.2		0.8 - 1.5
Sampling Date	dd-mmm-yy	-	15-Jan-24	17-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24		18-Jan-24
Analysis Date (on or before)	dd-mmm-yy	-	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24		27-Jan-24
Certificate of Analysis No.	-	-	24T111689	24T111689	24T111689	24T111689	24T111689		24T111689
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)									
Acenaphthene	ug/g	96	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Acenaphthylene	ug/g	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Anthracene	ug/g	0.74	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Benz[a]anthracene	ug/g	0.96	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Benzo[a]pyrene	ug/g	0.30	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Benzo[b]fluoranthene	ug/g	0.96	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Benzo[ghi]perylene	ug/g	9.6	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Benzo[k]fluoranthene	ug/g	0.96	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Chrysene	ug/g	9.6	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Dibenz[a h]anthracene	ug/g	0.10	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Fluoranthene	ug/g	9.6	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Fluorene	ug/g	69	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Indeno[1 2 3-cd]pyrene	ug/g	0.95	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Methlynaphthalene, 2-(1-)[1]	ug/g	85	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Naphthalene	ug/g	28	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Phenanthrene	ug/g	16	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Pyrene	ug/g	96	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Industrial/Commercial/Community Property-Use, Fine- to Medium-Textured Soil

-	Parameter not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	the sum of 1-methylnaphthalene and 2- methylnaphthalene

TABLE 4: SOIL ANALYTICAL RESULTS - METALS AND INORGANICS
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 I/C/C fine/medium	BH201-1	BH202-3	MW205-2	MW208-3	MW209-1	MW9000-1 Field Duplicate of MW209-1	RPD	MW210-2
Vapour Reading	see note	-	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm	<5 ppm		<5 ppm
Sample Depth	m bg	-	0.0 - 0.8	1.8 - 2.4	0.8 - 1.4	1.5 - 2.1	0.0 - 0.2	0.0 - 0.2		0.8 - 1.5
Sampling Date	dd-mmm-yy	-	15-Jan-24	15-Jan-24	17-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24		18-Jan-24
Analysis Date (on or before)	dd-mmm-yy	-	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24	27-Jan-24		27-Jan-24
Certificate of Analysis No.	-	-	24T111689	24T111689	24T111689	24T111689	24T111689	24T111689		24T111689
METALS										
Barium	ug/g	670	47.6	179	129	170	23.5	24.3	3%	108
Beryllium	ug/g	10	<0.5	0.9	1.1	1.3	<0.5	<0.5	-	0.7
Boron (Total)	ug/g	120	14	28	28	25	8	8	-	23
Cadmium	ug/g	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5
Chromium Total	ug/g	160	7	27	33	34	8	7	-	21
Cobalt	ug/g	100	4.7	14.4	16.7	14.8	3.1	2.9	-	10.2
Copper	ug/g	300	15.5	7.1	6.9	7.3	13.7	13.8	1%	9.2
Lead	ug/g	120	30	11	11	12	21	23	9%	11
Mercury	ug/g	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10
Molybdenum	ug/g	40	0.9	1.1	1.2	1.1	<0.5	<0.5	-	0.7
Nickel	ug/g	340	10	32	38	33	7	7	0%	22
Silver	ug/g	50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5
Thallium	ug/g	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5
Uranium	ug/g	33	0.59	0.74	1.06	1.32	0.56	<0.50	-	0.58
Vanadium	ug/g	86	10.5	32.5	38.5	43.1	13.3	12.4	7%	29.3
Zinc	ug/g	340	181	70	73	75	99	74	29%	62
HYDRIDE-FORMING METALS										
Antimony	ug/g	50	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	-	<0.8
Arsenic	ug/g	18	9	6	7	5	3	3	-	6
Selenium	ug/g	5.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	-	<0.8
OTHER REGULATED PARAMETERS (ORPs)										
Boron (Hot Water Soluble)[1]	ug/g	2.0	<0.10	0.17	0.2	0.23	0.12	0.14	-	0.42
Cyanide (CN-)	ug/g	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	-	<0.040
Chromium VI	ug/g	10	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
Methyl Mercury[2]	ug/g	0.0094	-	-	-	-	-	-	-	-
pH	pH Units	NV	7.28	7.27	7.28	7.27	7.87	7.95	-	7.49
Electrical Conductivity	mS/cm	1.4	0.264	0.278	0.28	0.232	0.181	0.211	15%	0.243
Sodium Adsorption Ratio	N/A	12	1.66	0.606	0.718	0.49	0.883	1.17	-	0.626

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Industrial/Commercial/Community Property-Use, Fine- to Medium-Textured Soil

-	Parameter not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
RPD	Relative percent difference
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
Value	Exceeds standard
Value	Detection limit exceeds standard
1	Hot water soluble boron applies to surface soils (<1.5 m bg).
2	Analysis for methyl mercury only applies when mercury standard is exceeded

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TABLE 5: SOIL ANALYTICAL RESULTS - PCBs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 I/C/C fine/medium	BH204-1
Vapour Reading	see note	-	<5 ppm
Sample Depth	m bg	-	0.3 - 0.6
Sampling Date	dd-mmm-yy	-	16-Jan-24
Analysis Date (on or before)	dd-mmm-yy	-	27-Jan-24
Certificate of Analysis No.	-	-	24T111689
POLYCHLORINATED BIPHENYLS (PCBs)			
Polychlorinated Biphenyls	ug/g	1.1	<0.1

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
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Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Industrial/Commercial/Community Property-Use, Fine- to Medium-Textured Soil

-	Not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard

TABLE 6: GROUNDWATER ANALYTICAL RESULTS - BTEX AND PHCs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 fine/medium	MW205	MW206	MW1000 Field Duplicate of MW206	RPD	MW208	MW209	MW210	Trip Blank
Vapour Reading	see note	-	<5 ppm	<5 ppm	-		5 ppm	<5 ppm	<5 ppm	-
Sample Depth	m bg	-	4.0 - 7.0	3.1 - 6.1	-		3.1 - 6.1	3.1 - 6.1	3.1 - 6.1	-
Sampling Date	dd-mmm-yy	-	8-Feb-24	8-Feb-24	8-Feb-24		8-Feb-24	8-Feb-24	8-Feb-24	2-Feb-24
Analysis Date (on or before)	dd-mmm-yy	-	13-Feb-24	13-Feb-24	13-Feb-24		13-Feb-24	13-Feb-24	13-Feb-24	13-Feb-24
Certificate of Analysis No.	-	-	24T119574	24T119574	24T119574		24T119574	24T119574	24T119574	24T119574
BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (BTEX)										
Benzene	ug/L	430	3.46	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20
Toluene	ug/L	18,000	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	ug/L	2,300	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10
Xylenes (Total)	ug/L	4,200	0.66	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20
PETROLEUM HYDROCARBONS (PHCs)										
Petroleum Hydrocarbons F1[1]	ug/L	750	<25	<25	<25	-	<25	<25	<25	<25
Petroleum Hydrocarbons F2	ug/L	150	<100	<100	<100	-	<100	<100	<100	-
Petroleum Hydrocarbons F3	ug/L	500	<100	<100	<100	-	<100	<100	<100	-
Petroleum Hydrocarbons F4	ug/L	500	<100	<100	<100	-	<100	<100	<100	-
Petroleum Hydrocarbons F4G	ug/L	500	NA	NA	NA	-	NA	NA	NA	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Fine- to Medium-Textured Soil

-	Not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	F1 fraction does not include BTEX

TABLE 7: GROUNDWATER ANALYTICAL RESULTS - PAHs
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 fine/medium	MW205	MW206	MW1000 Field Duplicate of MW206	RPD	MW208	MW209	MW210
Vapour Reading	see note	-	<5 ppm	<5 ppm	-		5 ppm	<5 ppm	<5 ppm
Sample Depth	m bg	-	4.0 - 7.0	3.1 - 6.1	-		3.1 - 6.1	3.1 - 6.1	3.1 - 6.1
Sampling Date	dd-mmm-yy	-	8-Feb-24	8-Feb-24	8-Feb-24		8-Feb-24	8-Feb-24	8-Feb-24
Analysis Date (on or before)	dd-mmm-yy	-	15-Feb-24	15-Feb-24	15-Feb-24		15-Feb-24	15-Feb-24	15-Feb-24
Certificate of Analysis No.	-	-	24T119574	24T119574	24T119574		24T119574	24T119574	24T119574
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)									
Acenaphthene	ug/L	1,700	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Acenaphthylene	ug/L	1.8	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Anthracene	ug/L	2.4	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10
Benz[a]anthracene	-	4.7	-	-	-	-	-	-	-
Benzo[a]pyrene	ug/L	0.81	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01
Benzo[b]fluoranthene	ug/L	0.75	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10
Benzo[ghi]perylene	ug/L	0.20	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Benzo[k]fluoranthene	ug/L	0.40	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10
Chrysene	ug/L	1.0	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10
Dibenz[a h]anthracene	ug/L	0.52	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Fluoranthene	ug/L	130	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Fluorene	ug/L	400	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Indeno[1 2 3-cd]pyrene	ug/L	0.20	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Methlynaphthalene, 2-(1-)[1]	-	1,800	-	-	-	-	-	-	-
Naphthalene	ug/L	6,400	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Phenanthrene	ug/L	580	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10
Pyrene	ug/L	68	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
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Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Fine- to Medium-Textured Soil

-	Parameter not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	the sum of 1-methylnaphthalene and 2- methylnaphthalene

TABLE 8: GROUNDWATER ANALYTICAL RESULTS - METALS AND INORGANICS
845 BURLOAK DRIVE, OAKVILLE, ONTARIO

Sample Name	Units	STANDARDS Table 3 fine/medium	MW205	MW206	MW1000 Field Duplicate of MW206	RPD	MW208	MW209	MW210
Vapour Reading	see note	-	<5 ppm	<5 ppm	-		5 ppm	<5 ppm	<5 ppm
Sample Depth	m bg	-	4.0 - 7.0	3.1 - 6.1	-		3.1 - 6.1	3.1 - 6.1	3.1 - 6.1
Sampling Date	dd-mmm-yy	-	8-Feb-24	8-Feb-24	8-Feb-24		8-Feb-24	8-Feb-24	8-Feb-24
Analysis Date (on or before)	dd-mmm-yy	-	12/13-Feb-24	12/13-Feb-24	12/13-Feb-24		12/13-Feb-24	12/13-Feb-24	12/13-Feb-24
Certificate of Analysis No.	-	-	24T119574	24T119574	24T119574		24T119574	24T119574	24T119574
METALS									
Barium	ug/L	29,000	57.2	104	113	8%	96.1	300	102
Beryllium	ug/L	67	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50
Boron (Total)	ug/L	45,000	178	227	259	13%	233	2,640	185
Cadmium	ug/L	2.7	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Chromium Total	ug/L	810	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0
Cobalt	ug/L	66	0.64	1.16	1.22	-	<0.50	0.72	0.6
Copper	ug/L	87	2.3	7.5	<1.0	-	<1.0	<1.0	1.3
Lead	ug/L	25	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50
Mercury	ug/L	2.8	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02
Molybdenum	ug/L	9,200	5.2	7.17	7.13	1%	4.36	20.6	5.86
Nickel	ug/L	490	2	5.1	3.5	-	2.6	2.7	2.9
Silver	ug/L	1.5	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20
Thallium	ug/L	510	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30
Uranium	ug/L	420	7.78	13.5	14.1	4%	9.91	9.07	7.28
Vanadium	ug/L	250	<0.40	0.52	0.49	-	<0.40	0.43	<0.40
Zinc	ug/L	1,100	<5.0	<5.0	<5.0	-	<5.0	5.8	5.7
HYDRIDE-FORMING METALS									
Antimony	ug/L	20,000	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0
Arsenic	ug/L	1,900	<1.0	2	1.7	-	1.6	2.7	<1.0
Selenium	ug/L	63	<1.0	2.4	3.8	-	1.3	4.6	<1.0
OTHER REGULATED PARAMETERS (ORPs)									
Cyanide (CN-)	ug/L	66	<2	<2	<2	-	<2	<2	<2
Chromium VI	ug/L	140	<2.000	<2.000	<2.000	-	<2.000	<2.000	<2.000
Methyl Mercury[2]	-	0.15	-	-	-	-	-	-	-
pH	pH Units	NV	7.21	7.24	7.26	-	7.12	7.32	7.32
Chloride	ug/L	2,300,000	2,080,000	1,960,000	1,960,000	0%	1,570,000	1,160,000	889,000
Sodium	ug/L	2,300,000	1,270,000	1,100,000	1,010,000	9%	701,000	276,000	384,000

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Fine- to Medium-Textured Soil

-	Parameter not analyzed
m bg	meters below grade
ppm	parts per million by volume
% LEL	percent of the lower explosive limit
RPD	Relative percent difference
NV	No Value; no standard established
NA	Not Applicable; no standard established because a standard is not required
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	Hot water soluble boron applies to surface soils (<1.5 m bg).
[2]	Analysis for methyl mercury only applies when mercury standard is exceeded

TERRAPEX

APPENDIX I
PLAN OF SURVEY

I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT,

DATE : _____ , 2010

C. A. SEXTON
ONTARIO LAND SURVEYOR

PLAN 20R-

RECEIVED AND DEPOSITED :

DATE : _____ , 2010

DEP. LAND REGISTRAR FOR THE LAND TITLES DIVISION OF THE HALTON (NO.20)

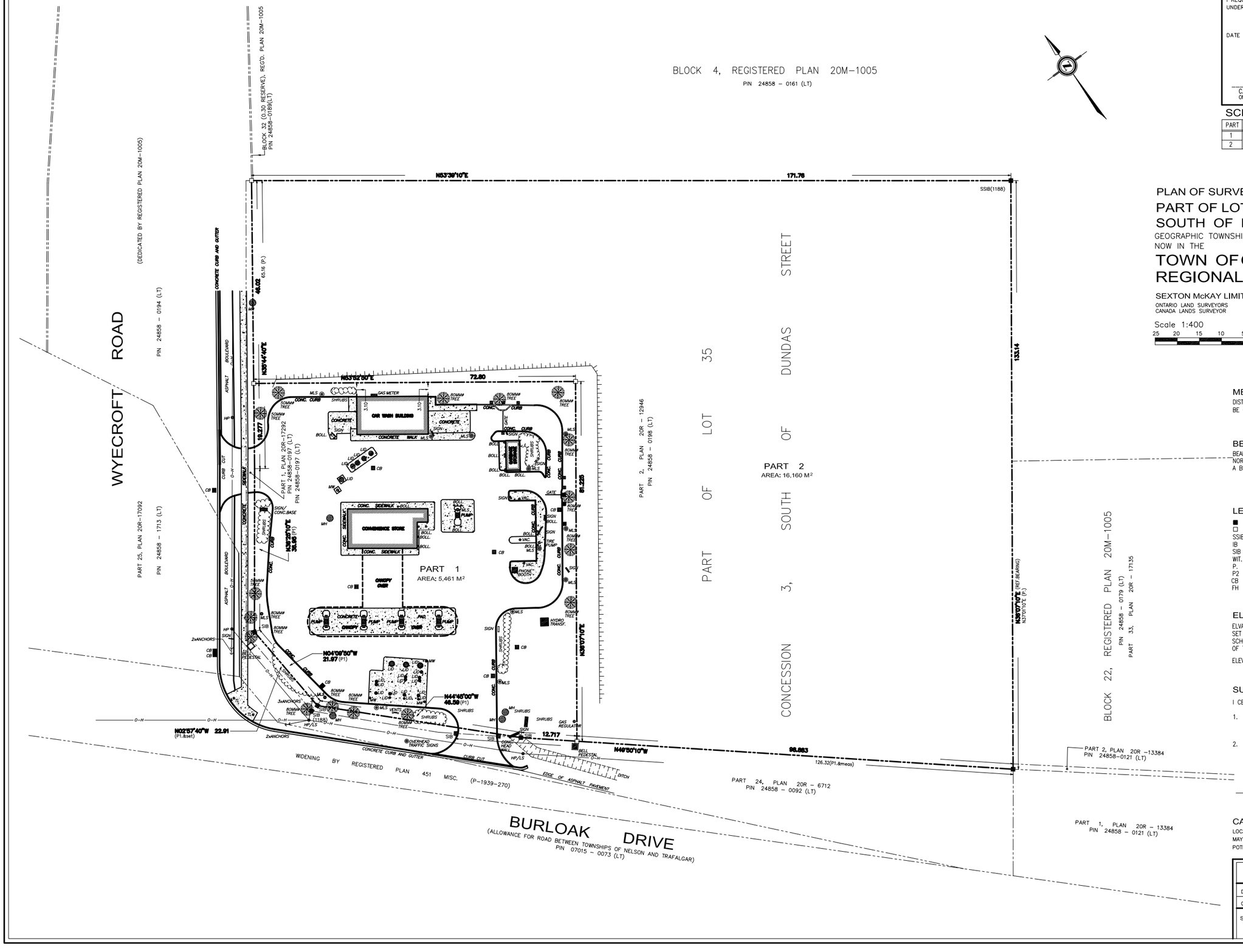
SCHEDULE

PART	LOT	CONCESSION	PIN	AREA (m^2)
1	PART OF LOT 35	CONCESSION 3 S.D.S.	24858-0198(LT)	5,461
2				16,160

PLAN OF SURVEY OF
PART OF LOT 35, CONCESSION 3, SOUTH OF DUNDAS STREET
GEOGRAPHIC TOWNSHIP OF TRAFALGAR)
NOW IN THE
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON

SEXTON McKAY LIMITED
ONTARIO LAND SURVEYORS
CANADA LANDS SURVEYOR

Scale 1:400
25 20 15 10 5 0 25 metres



METRIC NOTE:
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

BEARING NOTE
BEARINGS SHOWN HEREON ARE ASTRONOMIC AND ARE REFERRED TO THE NORTHEASTERLY LIMIT OF BLOCK 4, REGISTERED PLAN 20M-1005, HAVING A BEARING OF N36°07'10"E, IN ACCORDANCE WITH SAID PLAN.

LEGEND

■	DENOTES SURVEY MONUMENT FOUND	BOLL.	DENOTES STEEL BOLLARD
□	DENOTES SURVEY MONUMENT SET	O-H	DENOTES OVERHEAD HYDRO WIRES
SSIB	DENOTES STANDARD IRON BAR	ø	DENOTES DIAMETER
IB	DENOTES IRON BAR	TL	DENOTES TRAFFIC LIGHT
SIB	DENOTES STANDARD IRON BAR	HP/LS	DENOTES HYDRO POLE/LIGHT STANDARD
WIT.	DENOTES WITNESS	MLS	DENOTES METAL LIGHT STANDARD
P.	DENOTES PLAN 20R-12946	meas	DENOTES MEASURED
P2	DENOTES PLAN 20M-1005		
CB	DENOTES CATCH BASIN		
FH	DENOTES FIRE HYDRANT		

ELEVATION NOTE
ELVATIONS ARE DERIVED FROM CITY OF ST. CATHARINES BM NO. 8338018. BRASS TABLET SET VERTICALLY IN CONC. FOUNDATION ON MOST WESTERLY FACE OF FERNDALE PUBLIC SCHOOL ON THE SOUTHEAST CORNER OF DUNVEGAN RD. AND FERNDALE AVE., 60CM SOUTH OF THE NORTHWEST CORNER, 20CM BELOW BRICKWORK.

ELEVATION: 114.613

SURVEYOR'S CERTIFICATE
I CERTIFY THAT

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM;
2. THE SURVEY WAS COMPLETED ON THE 2ND. DAY OF MARCH, 2010.

DATE

C.A. SEXTON
ONTARIO LAND SURVEYOR

CAUTION
LOCATIONS OF ANY UNDERGROUND SERVICES ARE APPROXIMATE. OTHER BURIED UTILITIES MAY EXIST WHICH ARE NOT SHOWN BECAUSE OF INSUFFICIENT INFORMATION. CONTACT ALL POTENTIAL OWNERS OF UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION

DRAWN BY: m.l.
CHECKED BY: C. A. Sexton
JOB No. 21979W

SEXTON McKAY LIMITED - ONTARIO LAND SURVEYORS - CANADA LANDS SURVEYOR
70 EAST BEAVER CREEK ROAD UNITS 44 & 45 RICHMOND HILL ONTARIO L4B 3B2
(905)889-9103 FAX (905)889-8941

ACAD: APRIL 12, 2010

APPENDIX II
NON-POTABLE GROUNDWATER NOTIFICATION

March 8, 2024
CT3959.00

Halton Region
1151 Bronte Road
Oakville, Ontario
L6M 3L1

Attention: Regional Clerk

Via email: regionalclerk@halton.ca

Re: Notification of Environmental Standards
845 Burloak Road, Oakville, Ontario

Dear Sir/Madam:

Terrapex Environmental Ltd. (Terrapex) has been retained by the property owner to conduct a Phase Two Environmental Site Assessment at 845 Burloak Road in Oakville, Ontario (the site).

After reviewing Ontario Regulation (O. Reg.) 153/04 *Records of Site Condition - Part XV.1 of the Act,* Terrapex has determined that the site meets the requirements outlined in Section 35 of the regulation. As such, applicable full depth generic site condition standards in a non-potable groundwater condition will be applied to the analytical data obtained from the site.

On behalf of the owner, and in accordance with the requirements of Section 35 of O. Reg. 153/04, Terrapex is hereby providing written notice to the Halton Region of the intention to apply non-potable groundwater site condition standards in preparing a Record of Site Condition for the property at 845 Burloak Road in Oakville, Ontario.

If you have any questions or concerns regarding this matter, please do not hesitate to contact the undersigned.

Sincerely,
TERRAPEX ENVIRONMENTAL LTD.

Olivia Claxton, BES
Environmental Scientist

Sara Sutherland, LET, CET, EP QP$_{ESA}$
Senior Project Manager

APPENDIX III
SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

Site: 845 Burloak Drive, Oakville, Ontario
Project No: CT3959.00
Date: February 23, 2024

OBJECTIVES

Terrapex Environmental Ltd. (Terrapex) has prepared this sampling and analysis plan for a Phase Two Environmental Site Assessment (ESA) at 845 Burloak Drive in Oakville, Ontario, the "Phase Two Property" on behalf of Suncor Energy Partnership (Suncor). The Phase Two ESA is to be completed in accordance with Ontario Regulation (O.Reg) 153/04 under the Environmental Protection Act, *Records of Site Condition - Part XV.1 of the Act*. It is understood that the Phase Two ESA herein is being undertaken as part of the Town of Oakville development application process, and a Record of Site Condition (RSC) will not be filed for the Site as a change to a more sensitive land use is not required. The objective of this ESA is to determine the location and concentration of contaminants in the land or water on, in or under the Phase Two Property.

The Phase Two ESA will investigate all Areas of Potential Environmental Concern (APECs) which were identified in a Phase One ESA of the property conducted by Terrapex, dated February 2024. The APECs are shown on Figure 5 and listed in Table 1.

SAMPLING PROGRAM

The media to be investigated and the contaminants of concern have been determined based on findings from previous investigations and potential environmental concerns identified from on-site and off-site activities. The media, contaminants, investigation and sampling methods are summarized on Table 2. The rationale for each sampling location, and the proposed laboratory analytical program for each location, is shown on Table 3. Modifications may be made to the program during the course of implementation, based on field observations, and will be documented in the Phase Two ESA report.

STANDARD OPERATING PROCEDURES

The following Terrapex Standard Operating Procedures (SOPs) will be used:

SOP E01.00 – Field Meter Calibration
SOP E03.00 – Borehole Advancement Using Rotary Auger
SOP E03.01 – Borehole Advancement Using Percussive-Driven Samplers
SOP E04.00 – Monitoring Well Installation
SOP E05.00 – Monitoring Well Development
SOP E06.00 – Groundwater Monitoring
SOP E07.00 – Groundwater Sampling using Inertial Pump
SOP E07.01 – Groundwater Sampling, Low Volume Purge, Using Peristaltic Pump
SOP E09.00 – Soil Sample Handling
SOP E10.00 – Soil Classification
SOP E11.00 – Measuring and Surveying Using Rod and Level
SOP E12.00 – Field Program Quality Assurance & Quality Control

DATA QUALITY OBJECTIVES

The investigation will be completed following Terrapex SOP *E12.00 - Field Program Quality Assurance & Quality Control*, which specifies requirements for minimizing cross-contamination, record-keeping, sample storage, sample submission, field QA/QC samples and data quality objectives. If the data quality objectives are not met, the Qualified Person for the project will review the results and determine whether the deviation affects decision-making or the overall objectives of the investigation.

LABORATORY PROGRAM

Project Laboratory: AGAT Laboratories Ltd.

Accreditation: Standards Council of Canada (SCC) and Canadian Association for Laboratory Accreditation Inc. (CALA) in accordance with the International Standard ISO/IEC17025-2005 – *General Requirements for the Competence of Testing and Calibration Laboratories*

Proposed Analytical Program: See Table 1, attached.

Analytical Methods: The laboratory will use the methods specified in the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011 (Analytical Protocol).*

Sample Containers and Preservatives: See Table 3, attached.

AGAT's Quality Assurance/Quality Control (QA/QC) program will consist of the analysis of method blanks, laboratory control samples, matrix spikes, sample duplicates, and surrogates, as appropriate for the particular analysis protocol and as specified in the *Analytical Protocol.*

SUB-CONTRACTORS

All sub-contractors used in the Phase Two ESA will be approved suppliers according to Terrapex's ISO 9001:2008 system. The following sub-contractors will be retained for this project:

Private utility locates: Premier Locates
Borehole drilling and well installation: Geo-Environmental Drilling Inc.
Laboratory analyses: AGAT Laboratories Ltd.
Waste disposal: Clarkway Construction Co. Ltd.

ATTACHMENTS

Figure 5 – Areas of Potential Environmental Concern and Proposed Sampling Locations
Table 1 – Proposed Sampling Plan and Rationale
Table 2 – Media to be Investigated and Chemicals of Concern
Table 3 – Sample Containers and Preservation Plan

TABLE 1 PROPOSED SAMPLING PLAN AND RATIONALE
845 Burloak Drive, Oakville, Ontario

Borehole No.	Location	APEC	Depth (m)	Screened Interval (m)	Soil Sampling Depth Interval/Technique	Groundwater Sampling Method/Depth	Rationale	Lab Analyses										
								Vapour	Soil							Groundwater			
								VOCs, F1-F4	BTEX, F1-F4	VOCs	Metals & Inorg.	pH	Particle Size	PAHs	PCBs	BTEX, F1-F4	VOCs	Metals & Inorg.	PAHs
BH201	North corner of Site, west of car wash.	1 & 3	6.1		Entire length of borehole, grab sample every 0.750 to 2.4 m and split-spoon sampler every 0.75 m thereafter		Confirm the absence or presence of COCs in soil		1		1								
BH202	Northern portion of Site, southwest of car wash and north of convience store.	1 & 3	6.1		Entire length of borehole, grab sample every 0.750 to 2.4 m and split-spoon sampler every 0.75 m thereafter		Confirm the absence or presence of COCs in soil		1		1			1					
BH203	Southern portion of Site, east of tank nest.	1, 3 & 4	6.1		Entire length of borehole, split-spoon sampler every 0.75 m		Confirm the absence or presence of COCs in soil		1										
BH204	Southeast property boundary of Site, located near Transformer	2 & 3	0.6		Grab Sample		Confirm the absence or presence of COCs in soil								1				
MW205	Centrally located on Site, north of diesel pump area.	1 & 3	6.1	4.0 to 7.0	Entire length of borehole, split-spoon sampler every 0.75 m	Low-flow sampling using peristaltic pump, 1.0 m below the water table	Confirm the absence or presence of COCs in soil and groundwater		2		1			1		1		1	1
MW206	Eastern portion of Site.	3	6.1	3.1 to 6.1	Entire length of borehole, split-spoon sampler every 0.75 m	Low-flow sampling using peristaltic pump, 1.0 m below the water table	Confirm the absence or presence of COCs in soil and groundwater		1							1		1	1
BH207	Centrally located on Site, north of pump islands.	1 & 3	6.1		Entire length of borehole, split-spoon sampler every 0.75 m		Confirm the absence or presence of COCs in soil		1										
MW208	East corner of Site, southeast of car wash.	3	6.1	3.1 to 6.1	Entire length of borehole, split-spoon sampler every 0.75 m	Low-flow sampling using peristaltic pump, 1.0 m below the water table	Confirm the absence or presence of COCs in soil and groundwater		1		1			1		1		1	1
MW209	Southwestern portion of Site, west of tank nest.	1, 3 & 4	9.3	3.1 to 6.1	Entire length of borehole, split-spoon sampler every 0.75 m	Low-flow sampling using peristaltic pump, 1.0 m below the water table	Confirm the absence or presence of COCs in soil and groundwater		1		1			1		1		1	1
MW210	Western portion of Site, west of pump islands.	1, 3 & 4	6.1	3.1 to 6.1	Entire length of borehole, split-spoon sampler every 0.75 m	Low-flow sampling using peristaltic pump, 1.0 m below the water table	Confirm the absence or presence of COCs in soil and groundwater		1		1			1		1		1	1
BH211	Centrally located on Site, east of pump islands.	1 & 3	6.4		Entire length of borehole, split-spoon sampler every 0.75 m		Confirm the absence or presence of COCs in soil		1										
Total Before QA/QC Samples								**0**	**11**	**0**	**6**	**0**	**0**	**5**	**1**	**5**	**0**	**5**	**5**
QA/QC field duplicate							One duplicate per 10 samples		1		1			1		1		1	
QA/QC field blank (methanol blank for soil, deionized water blank for water)							One per sampling round (volatiles only)												
QA/QC trip blank							One per sampling round (volatiles in groundwater only)									1			
QA/QC trip spike							One per sampling round (volatiles in groundwater only)												
Total Laboratory Analyses								**0**	**12**	**0**	**7**	**0**	**0**	**6**	**1**	**7**	**0**	**6**	**5**

Notes: APEC = Area of Potential Concern, refer to phase one ESA
VOCs = volatile organic compounds (O. Reg. 153/04)
BTEX/F1-F4 = benzene, toluene, ethylbenzene, xylenes and petroleum hydrocarbons in the F1 to F4 fractions
Inorg. = metals and general inorganic parameters (O. Reg. 153/04)
PAHs = polycyclic aromatic hydrocarbons (O. Reg. 153/04)
PCBs = polychlorinated biphenyls

TABLE 2 - MEDIA INVESTIGATED, CONTAMINANTS OF CONCERN AND METHODS

Media	Contaminants of Concern	Investigation Method	Equipment	Sample Collection Method
Soil	Petroleum hydrocarbons Polycyclic aromatic hydrocarbons Polychlorinated biphenyls Benzene, toluene, ethylbenzene, xylenes Metals, metal hydrides Mercury Cyanide Chromium VI Hot water soluble boron Electrical conductivity Sodium absorption ratio (SAR)	Boreholes	CME 75 rotary auger rig	Split spoon sampler, sample every 0.75 m
Groundwater	Petroleum hydrocarbons Polycyclic aromatic hydrocarbons Volatile organic compounds Benzene, toluene, ethylbenzene, xylenes Metals, metal hydrides Mercury Cyanide Chromium VI Sodium, chloride Nitrite, nitrate	Monitoring wells	CME 75 rotary auger rig	Low-flow sampling using peristaltic pump, target top 0.5 m of water column
Soil Vapour	Not applicable	N/A	N/A	N/A

TABLE 3 - SAMPLE CONTAINERS AND PRESERVATION

Media	Analytical Parameter	Field Filtered	Sample Container	Preservation	Holding Time (preserved)
Soil	Metals, metal hydrides, hot water soluble boron, chromium VI, SAR, EC, pH	Not applicable	250 mL glass jar	5 ± 3 °C	180 days
	Cyanide	Not applicable	250 mL glass jar, teflon lined lid	5 ± 3 °C	14 days
	BTEX, PHC F1	Not applicable	40 mL glass vial and 60 mL glass jar, no headspace	10 mL methanol, 5 ± 3 °C	14 days
	BTEX, PHC F1	Not applicable	Hermetic sampler (Encore™)	5 ± 3 oC	Extract within 48 hrs
	PHCs F2-F4	Not applicable	120 mL glass jar, teflon lined lid	5 ± 3 °C	14 days
	VOCs	Not applicable	40 mL glass vial and 60 mL glass jar, no headspace	10 mL methanol, 5 ± 3 °C	14 days
	PAHs	Not applicable	120 mL glass jar, teflon lined lid	5 ± 3 °C	60 days
	PCBs	Not applicable	120 mL glass jar, teflon lined lid	5 ± 3 °C	Infinite
	Reg. 558 TCLP - non-volatiles	Not applicable	250 mL glass jar	5 ± 3 °C	
Groundwater	Metals, metal hydrides, sodium	Yes	250 mL HDPE bottle	HNO_3 to pH < 2 5 ± 3 oC	60 days
	Mercury	Yes	125 mL clear glass bottle	HCl to pH < 2 5 ± 3 oC	28 days
	Chromium VI	Yes	250 mL HDPE bottle	$(NH_4)_2SO_4/HN_4OH$ 5 ± 3 oC	28 days
	Cyanide	No	250 mL HDPE bottle	NaOH to pH > 12 5 ± 3 °C	14 days
	BTEX, PHC F1	No	3 x 40 mL clear glass septum vial, no headspace	$NaHSO_4$ to pH < 2 5 ± 3 $_o$C	14 days
	PHCs F2-F4	No	2 x 500 mL amber glass bottle	$NaHSO_4$ to pH < 2 5 ± 3 $_o$C	40 days
	PAHs	No	1 L amber glass bottle	5 ± 3 °C	14 days

SAR = sodium absorption ratio
EC = electrical conductivity
BTEX = benzene, toluene, ethylbenzene, xylenes
PHC F1 - F4 = petroleum hydrocarbons F1 to F4 fractions
VOCs = volatile organic compounds
PAHs = polycyclic aromatic hydrocarbons (O. Reg. 153/04)
PCBs = polychlorinated biphenyls
TCLP = toxicity characterization leachate procedure
HDPE = high density polyethylene

APPENDIX IV
STANDARDS OPERATING PROCEDURES

TERRAPEX STANDARD OPERATING PROCEDURE
FIELD VAPOUR METER CALIBRATION

GENERAL NOTES

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

This SOP describes calibration procedures and requirements for portable meters used to measure combustible vapours, volatile organic compounds, and/or other gases within an atmosphere. The procedures described herein are applicable to calibration both in the office and in the field (using a portable calibration kit).

GENERAL CALIBRATION PROCEDURES

1. Turn on the instrument and allow 5-10 minutes for it to warm up. When calibrating in the field, complete instrument warm up in a sheltered environment, or allow an additional 5-10 minutes for warm up.
2. Attach hoses, water traps, probe ends and other pieces that will be utilized during actual measurement, and set instrument to the intended measurement mode (e.g., on a Gastech Model 1238 ME, turn “methane elimination” on or off, as appropriate).
3. Check instrument flow rate to confirm suitable vapour intake.
4. In a baseline environment (e.g., ambient air), “zero” the instrument. Record any adjustments made on the instrument calibration log, including initial and final (calibrated) readings.
5. Fill an empty Tedlar bag with calibration gas, and connect it to the instrument. If the instrument being calibrated has multiple sensors for different ranges of target vapours (e.g., GasTech model 1238ME), calibrate the coarse range (higher concentrations) first.

6. Allow the instrument to equilibrate with the environment in the Tedlar bag and adjust the instrument span settings as appropriate. Record any adjustments made on the instrument calibration log, including initial and final (calibrated) readings.
7. Remove the Tedlar bag and confirm that the instrument returns to a baseline reading (e.g., zero reading on a combustible vapour meter).
8. Repeat steps 4 through 7, as necessary, for additional sensors and/or target vapours.

CALIBRATION REQUIREMENTS

Portable meters are to be calibrated prior to the start of a site visit, and prior to the start of each successive site visit if the project requires more than a single day onsite.

More frequent calibration may be required on projects where elevated vapour readings are frequently encountered, as such scenarios can results in calibration "drift" (erroneous readings on the instrument). Calibration drift is often characterized by one or more of the following conditions:

- Failure of the instrument to return to a baseline reading in ambient conditions;
- No response or apparently "sluggish" response of the instrument upon exposure to an environment containing target vapours; or,
- Inconsistent instrument readings despite exposure to apparently identical target environments.

Where calibration drift is suspected, the instrument should be recalibrated as soon as practicable. Readings potentially affected by calibration drift should be appropriately annotated on field notes/log sheets.

TERRAPEX STANDARD OPERATING PROCEDURE
BOREHOLE ADVANCEMENT USING ROTARY AUGER

GENERAL NOTES

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

This SOP is applicable to intrusive environmental investigations involving the advancement of borings using rotary auger drilling rigs employing 5 ft (approximately 1.5 m) long continuous flight hollow stem augers or solid stem augers. The SOP is applicable whether such activity constitutes the whole of a work program, or part of a larger work program.

EQUIPMENT

The following list details the standard equipment necessary for borehole advancement. Specific sites may require additional or specialized equipment.

- □ Portable vapour meter (e.g., Gastech™ 1238ME), calibrated and charged
- □ Vapour meter field calibration kit, if applicable
- □ tape measure with weighted end
- □ sampling equipment (gloves, bags, permanent marker)
- □ bucket for washing split spoon samplers
- □ detergent solution in spray bottle
- □ distilled/clean water in spray bottle
- □ laboratory-supplied sampling jars appropriate for contaminants of concern
- □ cooler with ice

□ laboratory chain of custody forms

□ field notebook

□ field borehole logs (F025)

□ site plan

□ scope of work/field work instructions

□ site-specific health and safety plan, including Job Safety Analysis and other POST™ documentation

□ Personal Protective Equipment (e.g., hard hat, vest, safety glasses, respirator, steel toe boots, gloves, hearing protection)

□ Camera

□ Measuring wheel or similar device

PREPARATION

- review scope, proposed borehole locations, and utility locates with project manager
- ensure utility locates are complete, contractor is confirmed, and site access is confirmed
- ensure equipment booked is suitable for site (e.g., tracked drill rig vs. truck-mounted rig)
- calibrate and sign-out field equipment

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Above ground and underground utilities and other services within the assessment area are to be located and identified in the field prior to drilling. Where appropriate, a private locating contractor should also be retained to identify secondary services such as yard lights, internal computer/communication lines, etc., and clear proposed borehole locations. All exclusions or conditions attached to utility service locates (e.g., notification requirements, Ahand dig only@ areas) are to be strictly adhered to.

NOMENCLATURE

Boreholes should be uniquely numbered on a sequential basis, and prefaced by ABH".

The initial round of borehole advancement should begin with borehole “BH101”, with subsequent boreholes advanced during this round identified as “BH102”, “BH103”, etc. Additional rounds of borehole advancement would begin by advancing the borehole count to the next 100 (e.g., the

first borehole from the second and third investigation program would be ABH201@ and ABH301@, respectively). Borehole numbering is to be maintained irrespective of the manner in which the borehole is advanced (e.g., if the second round of borehole advancement is completed using a method other than rotary auger drilling, it would still commence with borehole “BH201”).

If a monitoring well is installed in a borehole (refer to *Monitoring Well Installation*, SOP E04.00), the prefix “MW” is to be substituted for “BH”, however, the borehole numbering sequence is to be maintained (e.g., if the second borehole of the first round of investigation is instrumented as a monitoring well, it would be identified as “MW102”, not “MW101”).

Soil samples collected during borehole advancement should be numbered sequentially using the borehole number followed by a dash as a prefix, (e.g., sample ABH101-4", indicating the fourth sample from borehole BH101). Subdivided samples should be labelled with alphabetical suffixes from the top of the sample (e.g., ABH101-4A@ and ABH101-4B@, with the later sample located at the greater depth).

All alphabetical prefixes and suffixes should be written in capital letters.

FIELD PROCEDURES

Sampling

Split spoons are to be advanced, where possible, 2 ft. (approx. 61 cm) below the end of the augers at regular 2.5 ft. intervals (e.g. 0 ft., 2.5 ft., 5 ft., etc.), beginning at ground surface, and at regular 2.5 ft. intervals thereafter (i.e. 2.5 ft., 5 ft., 7.5 ft., etc.). Standard penetration tests should be conducted to advance the spoon, and the number of blows required to drive the spoon each 6 in. (approx. 150 mm) interval recorded.

For boreholes advanced in areas of asphalt, concrete, or crushed stone surfacing, the initial spoon should be advanced starting at the base of the surfacing, and to a depth no greater than 2.5 ft. to permit subsequent spoons to be advanced at regular intervals beginning at 2.5 ft. (e.g. 2.5 ft., 5 ft., 7.5 ft., etc.). The thickness and type of the Aunsampled@ surfacing material is to be measured and recorded on the borehole log.

Split spoon advancement should be abandoned at Arefusal@. ARefusal@ includes greater than 50 blows to drive a spoon 6 in. (150 mm) or less.

Where significant Acaving@ or Aslough@ occurs, or may occur, between sample intervals, hollow stem augers should be used to advance the borehole and to facilitate the installation of a monitoring well (if applicable) in the completed boring. Sand traps may be used to improve sample recovery, where necessary, when advancing split spoons into wet, non-cohesive soils (e.g. sands and gravels).

Split spoon samples are to be cleaned prior to use using soapy water and a fresh water rinse.

Recovered soil samples should be handled and screened in the field as specified in *Soil Sample Handling* (SOP E09.00). Where appropriate, samples should be divided into two or more sub-samples to facilitate logging of observed changes in geological conditions (stratigraphy, etc.) or evidence of possible impact (staining, odours, etc.). Subdivided samples should be identified as described in the Nomenclature section above; i.e., assigning the suffix AA@ to the sub-sample at the top of the spoon (the sample first collected), then AB@, AC@, etc.

Boreholes are to be advanced to at least the maximum anticipated depth of potential impact (e.g., at least the water table for investigations of possible petroleum hydrocarbon impacts). Whenever possible, the final depth of the borehole should approximately delineate the vertical extent of contamination in the vicinity of the borehole (e.g., one Aclean@ sample should be obtained from the base of the borehole).

Note Taking

Use the Terrapex field borehole form (Form F025). Always fill in every field of the top portion of the form completely - logs can easily get separated from each other. Note the outer diameter of augers. It is a good practice to supplement written field notes with pictures, especially of recovered soil cores to illustrate structure (layers, banding), staining, and similar features.

Avoid using non-established short forms on all descriptions. Do not scribble anything out or erase, just place a line through the word.

The type and thickness of surfacing materials (asphalt, concrete and/or crushed stone) should also be recorded.

Record the sampling interval graphically as the interval over which the split spoon was driven, not the length of the spoon (i.e., record the actual sampling interval, accounting for refusal, not the planned sampling interval).

Label each sample collected as 1, 2, 3, etc. as specified in the Nomenclature section. Do not start a new set of numbers if you change collection methods. Do not use depth intervals for the sample name (e.g. 10'-12').

Record percent recovery based on how far you drove the spoon (actual sampling interval), not one length of the spoon or the intended sampling interval, rounded to the nearest 5%.

$$\% \text{ recovery} = (\text{Quantity of soil recovered})/(\text{distance spoon was driven}) \times 100\%$$

For example, if the spoon was driven 60 cm (2 ft), and 20 cm (8") of soil was recovered, % recovery = (20 cm / 60 cm) x 100% = 33.33%, rounded to 35%.

Record blow counts based on Standard Penetration Test (blows to drive the split spoon 6 inches). If it takes more than 50 blows to drive the spoon less than 6 inches, record as 50/x@, where x is the number of inches the spoon was actually driven, and terminate the test.

When screening soil headspace vapours, record vapour readings AND units. Note the instrument number used to collect vapour readings. If you are using an instrument other than the default GasTech 1238 combustible meter or equivalent, note the type of instrument.

If there is no deflection on the combustible gas meter (or other field headspace screening instrument) record the reading as less than the effective detection limit (<10 ppm for combustible gas meters), not 0 ppm.

For odours, use NONE, SLIGHT, MODERATE and STRONG. The default is assumed to be hydrocarbon odour; other types of odours require a description entered onto the log. Do not leave this blank unless you did not check for odours.

Refer to the *Soil Classification* (SOP E10.00) for standard terminology for recording sample descriptions. In addition:

- always record the relative grain size of sand particles (fine/medium/coarse), not just Asand@;
- note any structural observations (bedding, etc.)
- record presence of rootlets/roots, organic matter, debris, and anything else that might help determine whether the soil is fill or native;
- note fractures and location, width, weathered, staining, open, closed, tight.
- for sand seams, record the depth and thickness as well as a description (coarse, wet, etc.).

Clearly and fully document the stratigraphy encountered during drilling and soil sampling, including the depths of stratigraphic contacts observed within split spoons (e.g., located within sampling intervals). If there are distinct layers within a split spoon, the samples should be divided into sub-samples and identified with suffixes A, B, C, etc. as described above.

The depth and reasons for abandoning further borehole advancement (e.g., refusal at bedrock, depth of desired investigation obtained) is to be recorded on the log.

Backfilling

This section applies to boreholes in which monitoring wells are not installed. Refer to Monitoring *Well Installation* (SOP E04.00) for instrumenting boreholes as monitoring wells.

To ensure that the boring does not represent a potential conduit for groundwater flow or contaminant migration, boreholes are to be backfilled using bentonite chips and subsequently hydrated by the addition of a sufficient volume of potable-grade water. Where boreholes have been advanced through a hole cut through asphalt, concrete or similar hard surfacing, a concrete patch is to be applied to mitigate further cracking/degradation of surface treatments.

Prior to Leaving Site

- □ Check the scope of work to ensure you have completed project objectives
- □ Measure the final location of all boreholes from permanent site features and show on site plan (refer to *Measuring and Surveying using Rod and Level*, SOP E11.00)
- □ Ensure boreholes are properly backfilled and the site is sufficiently restored
- □ Clean up any garbage or debris and leave the site the way you found it (or better)
- □ Call the project manager to ensure there is nothing else required, to summarize findings and results**,** and select final lab samples
- □ Pack and submit samples to lab with chain of custody

UPON RETURN TO OFFICE

- Clean and sign in all equipment used
- Log in soil samples in soil bins
- Complete equipment and supply form
- Complete field package (place logs and photocopies of relevant field log book pages in project file folder)
- Submit site drawing depicting borehole locations to drafting.

TERRAPEX STANDARD OPERATING PROCEDURE
MONITORING WELL INSTALLATION

GENERAL NOTES

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

This SOP is applicable to the installation of monitoring wells following the vertical advancement of a borehole in overburden or bedrock. Borehole drilling procedures are not covered by this SOP.

EQUIPMENT

The following list details the standard equipment necessary for monitoring well installation over and beyond that required for borehole advancement. Specific sites may require additional or specialized equipment.

- □ Well screen and riser pipe
- □ “well gravel” (silica sand)
- □ Bentonite chips
- □ Cement mix
- □ End caps
- □ Expandable gripper caps (“J-plugs”)
- □ Protective casings
- □ locks
- □ clean, disposable vinyl or nitrile gloves

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

A well record (per R.R.O. 1990, Reg. 903) must be completed by the drilling contractor for all monitoring wells greater than 3 m in depth, or for any well (regardless of depth) installed with a contaminated or potentially contaminated area. All necessary information to complete the well record (e.g., well owner, their address and telephone number, etc.) is to be on hand during installation or provided to the well contractor prior to the start of the work program.

Wells shall not be installed in a manner that would facilitate the migration of liquids between differing water-bearing units, or between overburden and bedrock. The subsurface stratigraphy at the borehole location should be thoroughly assessed prior to well installation.

Monitoring wells to be used for the collection of groundwater samples for laboratory analyses shall be installed such that the saturated portion of the well screen has a length less than or equal to 3.1 m.

NOMENCLATURE

Monitoring wells will be assigned numbers corresponding to the borehole numbering (refer to the appropriate borehole advancement SOP), identified by a “MW” prefix in place of “BH” (e.g., borehole “BH101” becomes “MW101”).

Multi-level well installations, whether installed within a common boring or as a series of separate borings in immediate proximity of each other, will be identified through the use of alphabetical suffixes from the deepest to the shallowest installation (e.g., “MW101A” is deeper than “MW101B”); this convention is based on the principle that numbering begins with the initial installation, and proceeds sequentially thereafter.

All alphabetical prefixes and suffixes should be written in capital letters.

The assigned well name is to be recorded on the well casing, on the outside of the well standpipe, and/or the top (outside) of the well standpipe cap/plug.

FIELD PROCEDURES

Well Construction

Monitoring wells must be constructed of new, clean materials. Every individual (including drilling contractor staff) involved in the installation of a monitoring well shall be provided, and must wear,

a new, clean pair of disposable gloves. Gloves should be changed between installations, and whenever contact with a potential contaminant occurs.

The base of the completed boring should be measured using a weighted tape and recorded prior to well installation. It is not acceptable to rely on estimates of the completed boring depth based on the number of auger sections used to advance the borehole, etc.

The well should be constructed such that the screened portion of the well intersects the depth range of interest (e.g., the top of the unconfined water table for a typical investigation of potential petroleum hydrocarbon impacts).

Well screens shall intersect a single water-bearing unit only. If the depth range of interest comprises multiple water-bearing units, multi-level well installations should be used. Well screens shall not traverse the bedrock-overburden interface. If the depth range of interest includes both bedrock and overburden, multi-level well installations should be used.

To prevent pooling in the bottom cap of the monitoring well that may introduce bias to monitoring results (e.g., when the groundwater table drops below the base of the well), the bottom cap of monitoring wells should include a suitable slot or drainage hole. Where necessary, an undraining bottom cap may be equipped with a slot by making a short cut through the bottom of the cap using a hacksaw or similar tool.

The length of the screened interval, as well as the depth of installation (base of the screened interval) are to be measured and recorded, along with the well slot size, standpipe thickness (e.g., schedule 40, schedule 80, etc.), and standpipe diameter. The length of the screened interval should not exceed 3.1 m (10 ft), and the screened interval of the well should extend no higher than a depth of 1.2 m (4 ft) below ground surface to ensure adequate sealing of the boring annulus.

“Well gravel” (filter pack) should be placed in the annulus of the borehole either by manually filling the annual space, or by using a tremie pipe. The grading classification (e.g., No. 1, No.2, etc.) of well gravel used should be recorded. The top of the filter pack should ideally be located between 15 and 30 cm (6 and 12 in) above the top of the screened interval of the well. The depth of the top of the filter pack should be measured using a weighted tape and recorded. It is not acceptable to rely on estimates of the depth of the top of the filter pack.

The remaining annulus of the well should be backfilled using bentonite chips or an equivalent sealant material, to a depth of approximately 45 cm (18 in) below ground surface. Where applicable, sealant material should be hydrated by the addition of a sufficient volume of potable-grade water during installation (e.g., in lifts) and at the conclusion of sealant placement. The depth of the top of the sealant should be measured and recorded.

A flush-mount or monument ("stick-up") protective casing shall be set in concrete overtop the well. If a monument casing is installed, the height of the above grade portion of the well standpipe (not the casing) is to be measured and recorded.

Surveying, Establishment of Measuring Points

A consistent measuring point for future groundwater monitoring events is to be indicated on each well by placing a shallow notch on the outside of the well standpipe at its highest point. The elevation of the "ground surface" and "top of pipe" are to be surveyed relative to an appropriate temporary or geodetic benchmark. All "top of pipe" elevations are to be surveyed by placing the rod on the shallow notch (measuring point) on the outside of the well standpipe. Refer to SOP E11.00 (*Measuring and Surveying using Rod and Level*) for additional surveying details.

MULTI-LEVEL INSTALLATIONS

The preferred method for completing multi-levelled well installations is to complete a separate boring for each screened interval in the immediate vicinity of each other ("nested installation"). Nested installations should not be separated from the adjoining installation by distances greater than 2 m.

Within nested installations, it is typically only necessary to collect soil samples and log stratigraphy within the deepest boring. However, each well installation is to be logged and recorded on a separate field form/report log with each log illustrating a single standpipe in a unique boring.

If multiple well standpipes are placed within the same boring, an appropriate sealant with a thickness of at least 2 m must be used to mitigate migration of liquids between the screened intervals. Such installations are to be logged and recorded on a single field form/report log that illustrates the multiple standpipes within a common boring.

FIELD DOCUMENTATION

Monitoring well installations should be recorded on field form F025 (field borehole log). Refer to the appropriate borehole advancement SOP for general borehole logging procedures.

TERRAPEX STANDARD OPERATING PROCEDURE
MONITORING WELL DEVELOPMENT

GENERAL NOTE

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

These procedures are applicable to developing monitoring wells or piezometers installed for the purposes of monitoring groundwater conditions, hydraulic conductivity or similar in-situ testing, and/or recovering samples for physical inspection/laboratory analytical testing. The procedures are applicable whether such activity constitutes the whole of a work program, or part of a larger work program.

EQUIPMENT

The following list details the standard equipment necessary for groundwater monitoring. Specific sites may require additional or specialized equipment.

- □ Well opening tools (e.g., hex wrench , $^{9}/_{16}$" socket wrench, pry bar, well keys)
- □ bucket for washing down-hole field equipment
- □ detergent solution in spray bottle
- □ distilled/clean water in spray bottle
- □ Surge-block
- □ File for well notching
- □ field notebook
- □ well development field form (F054)
- □ site plan

- □ scope of work/field work instructions
- □ site-specific health and safety plan, including Job Safety Analysis and other POST™ documentation
- □ Personal Protective Equipment (e.g., hard hat, vest, safety glasses, respirator, steel toe boots, gloves, hearing protection)
- □ Camera

PREPARATION

- review scope of work with project manager
- ensure site access is confirmed
- calibrate and sign-out field equipment

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Traffic spotters should be employed when development activities include wells located in the travelled portion of a roadway or in high-traffic areas. A traffic control plan in accordance with Ontario Ministry of Transportation (MTO) guidelines must be implemented for all work in road allowance.

Accumulated headspace vapours, the depth to water, the depth to the bottom of the well, and the depths to any water/non-aqueous phase liquid (NAPL) interfaces within the well should be measured (refer to SOP E06.00, *Groundwater Monitoring*) prior to development so as to establish baseline conditions.

Waters removed from wells in which there is evidence of significant contamination (e.g., NAPL) should be containerized for future disposal off-site.

Well development is NOT synonymous with purging completed prior to groundwater sampling, and wells must be permitted to return to equilibrium conditions prior to subsequent monitoring, in-situ testing, and/or sampling efforts. The period of recovery will vary depending on well construction and subsurface conditions, but will be no less than twenty-four hours regardless.

FIELD PROCEDURES

Objectives

Monitoring wells are developed in order to remove "drilling debris" - entrained particulate in the well standpipe, well screen and filter pack, and surrounding formation materials - thereby

mitigating potential bias that may occur during groundwater monitoring, in-situ hydraulic testing, or laboratory analyses of recovered groundwater samples. A secondary objective of development is to remove waters that may have been introduced during drilling (e.g., water used as coolant during diamond coring), or that may have been impacted by drilling fluids used during drilling (e.g., mud-rotary augering).

Development Requirements

Non-dedicated down hole equipment employed during development must be cleaned using soapy water and a fresh water rinse prior to use within a well.

Development is conducted until the well yields water free of visible particulate. At a minimum, at least one borehole volume of water (defined as the initial volume of water in the well standpipe plus the volume of water in the filter pack surrounding the well) should be removed from the well during surge/purge cycles.

Where water or drilling fluids have been introduced during borehole drilling and/or monitoring well installation, the minimum volume of water to be removed from the well during the surge/purge cycles should be calculated as the greater of:

i. three times the volume of the water/fluids introduced (or "lost") to the subsurface during drilling; and,

ii. one borehole volume of water (defined as the initial volume of water in the well standpipe plus the volume of water in the filter pack surrounding the well).

Under certain circumstances, development may be halted prior to achieving visibly particulate-free discharges waters and removing the required volume of water:

- If the well has been purged to a “dry” condition on three consecutive surge/purge cycles, and where the water column within the well standpipe has been permitted to recover to at least 90% of its initial height between each surge/purge cycle; or,
- If the well has been purged to a “dry” condition during surging/purging, where at least three times the volume of water/fluids introduced ("lost") to the subsurface have been removed, and where the water column within the well standpipe has not returned to at least 90% of its initial height following a recovery period of 24 hours or more; or,
- Following the removal of an “excessive” volume of water from a well that has yielded water continuously during surge/purge cycles, where “excessive” is defined as **the greater of**:
    i. a volume exceeding three times the initial borehole volume of water (where a borehole volume is calculated as the volume of water in the well standpipe plus the volume of water in the filter pack surrounding the well);
    ii. ten times the initial volume of water in the well standpipe; and,

iii. three times the volume of the water/fluids introduced (or "lost") to the subsurface during drilling.

The start and stop time of development, equipment used (e.g., surge block, bailer), the volume of water removed, and the rationale for ceasing development efforts (e.g., particulate-free water obtained, excessive volume of water removed) are to be recorded for each well.

Bailers and Inertial Samplers

Inertial samplers generally exert a weak “surging” action, and as a result typically require significantly more water to be purged from a well to achieve a particulate-free state.

A relatively strong surging action can be achieved using a bailer if:

- the bailer is rapidly removed from the well; and,
- the removal results in a significant instantaneous drop in the water level within the well standpipe.

This generally requires the use of an elongated bailer (e.g., a 36" nominal length rather than a 12" nominal length bailer) with an outside diameter only marginally less than the inside diameter of a well standpipe (e.g., a 1.66" nominal diameter bailer within a 2" nominal diameter monitoring well), as well as a sufficient volume of water in the well to fill or nearly fill the bailer. The well must yield a sufficient volume of water to permit particulate mobilized during the removal of the bailer to be subsequently captured as the bailer is reintroduced into the well. (Otherwise, the particulate will simply settle at the bottom of the well standpipe.)

Because of their relatively weak surging action, the use of bailers and inertial samplers may result in poor development of wells that do not yield water continuously.

Surge Blocks

Surge blocks generates significant surging action and are therefore quite effective for wells that do not yield water continuously and/or that contain a significant amount of particulate (e.g., wells installed in borings advanced through bedrock).

However, surge blocks do not contribute any purging action, and must therefore be combined with a sampling or pumping device (e.g., a bailer or an inertial sampler) to remove mobilized particulate. Moreover, surge blocks generally cannot be employed within a well that has down-hole equipment installed within, necessitating the successive installation and removal of the paired sampling/pumping device. Care must be taking to ensure that neither the surge block nor the sampling/pumping device come into direct contact with the ground while they are being installed, removed, used, or otherwise manipulated.

As surge blocks are not dedicated sampling equipment, they must be cleaned using soapy water and a fresh water rinse prior to use in a well.

PRIOR TO LEAVING SITE

□ Check the scope of work to ensure you have completed project objectives

□ Verify the site plan accurately reflects site features and infrastructure (e.g., plan does not indicate buildings that have since been demolished, wells that have been decommissioned, etc.)

□ Clean up any garbage or debris and leave the site the way you found it (or better)

□ Call the project manager to ensure there is nothing else required, to summarize findings and results

UPON RETURN TO OFFICE

- Clean and sign in all equipment used
- Complete equipment and supply form
- Complete field package (place logs and photocopies of relevant field log book pages in project file folder)
- Submit any necessary revisions to site plan to drafting.

TERRAPEX STANDARD OPERATING PROCEDURE
GROUNDWATER MONITORING

GENERAL NOTE

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

These procedures are applicable to monitoring headspace vapours, depth to water, and non-aqueous phase liquid (NAPL) thicknesses within existing groundwater monitoring wells. The procedures are applicable whether such activity constitutes the whole of a work program, or part of a larger work program.

EQUIPMENT

The following list details the standard equipment necessary for groundwater monitoring. Specific sites may require additional or specialized equipment.

- ☐ Portable vapour meter (e.g., Gastech™ 1238ME), calibrated and charged
- ☐ Vapour meter field calibration kit, if applicable
- ☐ "oil/water" interface probe
- ☐ Well opening tools (e.g., hex wrench , $^{9}/_{16}$" socket wrench, pry bar, well keys)
- ☐ File for well notching
- ☐ bucket for washing down-hole field equipment
- ☐ detergent solution in spray bottle
- ☐ distilled/clean water in spray bottle
- ☐ field notebook
- ☐ field groundwater monitoring form (F018)

☐ site plan

☐ scope of work/field work instructions

☐ site-specific health and safety plan, including Job Safety Analysis and other POST™ documentation

☐ Personal Protective Equipment (e.g., hard hat, vest, safety glasses, respirator, steel toe boots, gloves, hearing protection)

☐ Camera

PREPARATION

- review scope of work with project manager
- ensure site access is confirmed
- calibrate and sign-out field equipment

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Traffic spotters should be employed when monitoring activities include wells located in the travelled portion of a roadway or in high-traffic areas. A traffic control plan in accordance with Ontario Ministry of Transportation (MTO) guidelines must be implemented for all work in road allowance.

Groundwater monitoring should not be conducted on wells that have not been developed (refer to SOP E05.00, *Monitoring Well Development*), and should only be conducted if at least 24 hours has elapsed since well development efforts were completed.

FIELD PROCEDURES

General Instructions

Groundwater monitoring activities comprise the measurement of accumulated headspace vapours, the depth to water, the depth to the bottom of the well, and the depths to any water/NAPL interfaces detected within a well. Vapour measurements should be collected immediately upon removal of the well plug/cap to minimize venting of accumulated vapours.

To minimize contamination of the interface probe and tape, well depths should not be measured if floating (“light”) NAPL is encountered.

As part of the groundwater monitoring activities, each monitored well should be inspected to assess whether the well casing is intact, MOE well record tags (if present) remain attached to the well, and that the well standpipe is equipped with an appropriate plug/cap. Damage to the well or surrounding ground surfacing should be recorded, and broken/missing plugs or caps replaced.

If the well name recorded on the well casing, outside of the well standpipe, or top of the well standpipe cap/plug has faded or smudged, a replacement identifier is to be placed. However; it is imperative that appropriate steps be taken to confirm the well identification before doing so to avoid mislabelling.

Headspace Vapour Measurements

A water trap must be used for the field vapour meter if it is available. The probe tip is to be inserted approximately 15 cm into the well or other headspace being measured, unless this would result in immersing the probe tip in water. Cover the opening as best as possible to mitigate venting of vapours and record the highest vapour level indicated on the meter within the 30 seconds of inserting the probe tip.

When utilizing Gastech 1238 ME combustible (or "hydrocarbon") vapour meters or equivalent devices, switch to the % LEL (percentage of lower explosive limit) scale when measured vapours in excess of 500 parts per million by volume (ppm). Recognize that Gastech 1238 ME and equivalent devices are considered to have an effective detection limit of 10 ppm; readings of zero or readings less than 10 ppm are to be recorded as "< 10 ppm".

Depth to Water and Water/NAPL Interface Measurements

Prior to use in a well, the interface probe is to be cleaned using soapy water and a fresh water rinse. The grounding clip is to be attached to the well casing or an equivalent grounding point before inserting the probe into the well.

Depths to water and any water/NAPL interfaces are to be measured relative to established measuring points (a notch on the outside of the well standpipe). Should a well lack an established measuring point, a file should be used to create a notch on the outside of the well standpoint <u>at its highest point</u>, and this point should be used to measure depths.

Depths are to be recorded to the gradations provided on the probe tape (typically 5 mm), or at least the nearest 0.5 cm if the tape lacks more detailed gradational markings.

If the presence of NAPL is indicated by the interface probe, depths to the interface of water and floating NAPL (LNAPL) in the well are to be determined by lowering the probe past the apparent interface and slowly raising the probe until the presence of NAPL is indicated. For sinking NAPL (DNAPL), depths to the water/NAPL are to be determined by raising the probe above the apparent interface and slowly lowering the probe until the presence of NAPL is indicated. This

approach will limit potential measurement bias associated with adherence of non-polar NAPL to the probe surface as it is raised/lowered in the well water column.

If the interface probe does not indicate the presence of floating NAPL (LNAPL), but other factors suggest LNAPL may be present (e.g., high headspace vapour readings, “sheen” on the probe, historical LNAPL findings), a clean disposable bailer should be used to recover a water sample and visually assess the possible presence of LNAPL. Such verification efforts and their findings should be documented in the field notes.

Prior to Leaving Site

- Check the scope of work to ensure you have completed project objectives
- Verify the site plan accurately reflects site features and infrastructure (e.g., plan does not indicate buildings that have since been demolished, wells that have been decommissioned, etc.)
- Clean up any garbage or debris and leave the site the way you found it (or better)
- Call the project manager to ensure there is nothing else required, to summarize findings and results, and select final lab samples

UPON RETURN TO OFFICE

- Clean and sign in all equipment used
- Complete equipment and supply form
- Complete field package (place logs and photocopies of relevant field log book pages in project file folder)
- Submit any necessary revisions to site plan to drafting.

TERRAPEX STANDARD OPERATING PROCEDURE
GROUNDWATER SAMPLING, LOW VOLUME PURGE, USING PERISTALTIC PUMP

GENERAL NOTES

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

This SOP is applicable to the collection of groundwater samples from developed monitoring wells using a positive displacement peristaltic pump, or "roller" pump. Procedures for well development are defined in SOP E05.00, *Monitoring Well Development*, while procedures for pre-screening ("monitoring") of groundwater conditions are described in SOP E06.00, *Groundwater Monitoring*.

EQUIPMENT

The following list details the standard equipment necessary for groundwater sampling. Specific sites may require additional or specialized equipment.

- □ Portable combustible vapour meter (e.g., Gastech™ 1238ME), calibrated and charged
- □ Combustible vapour meter field calibration kit, if applicable
- □ Water level indicator or equivalent (e.g., interface probe)
- □ Multi-meter capable of measuring pH, conductivity, ORP/redox potential, and dissolved oxygen
- □ Flow-through cell
- □ Variable-speed Peristaltic Pump
- □ Equipment cleaning/decontamination supplies (spray bottle with detergent solution, spray bottle with distilled/potable-grade water, paper towels)

- ☐ Well opening tools (hex keys, brass key, socket wrench, screwdriver, pry bar, well key)
- ☐ Turkey baster or other equipment to purge or bail accumulated water within protective casings
- ☐ File for well “notching”
- ☐ bucket with volume markings
- ☐ laboratory-supplied sampling containers appropriate for contaminants of concern
- ☐ cooler with ice
- ☐ laboratory chain of custody forms
- ☐ field notebook
- ☐ well sampling form (F028)
- ☐ site plan
- ☐ scope of work/field work instructions
- ☐ site-specific health and safety plan, including Job Safety Analysis and other POST™ documentation
- ☐ Personal Protective Equipment (hard hat, vest, safety glasses, respirator, steel toe boots, gloves, hearing protection)
- ☐ Camera
- ☐ Measuring wheel or similar device

PLANNING

- ☐ review scope of work and well locations with project manager
- ☐ ensure site access is confirmed
- ☐ calibrate and sign-out field equipment

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Traffic control and, flag persons, and/or spotters should be employed when groundwater sampling activities include wells within a road allowance, or in high-traffic areas of a site (e.g., an operating retail fuel outlet). Traffic control plans must correspond to Ontario Ministry of Transportation guidelines/requirements.

Groundwater samples should not be collected from wells that have not been developed (refer to SOP E05.00, *Monitoring Well Development*).

Care should be taken when handling sampling containers pre-charged with sample preservative for safety reasons (they are generally acids), and so that preservative is not inadvertently lost.

NOMENCLATURE

Groundwater samples are assigned names that correspond to the well from which the sample was collected (e.g., sample name “MW110A” is assigned to the sample recovered from monitoring well MW110A).

FIELD PROCEDURES

Prior to use, the peristaltic pump is to be outfitted with new silicone tubing for the sampling mechanism, and any non-dedicated equipment is to be cleaned using soapy water and a fresh water rinse. New and/or dedicated tubing is to be employed to draw water into and out from the pump.

To mitigate potential cross-contamination:

- always don fresh latex/nitrile gloves for each sample collection;
- do not allow the sampling equipment to touch sample bottles (preservatives from one bottle may be a “contaminant” for another bottle)
- use dedicated sampling equipment to the maximum extent possible;
- decontaminate non-dedicated monitoring equipment between samples; and,
- Wells should be sampled beginning with “least” impacted and progressing to the “most” impacted wells to minimize cross-contamination potential. The determination of relative impact should be made using information obtained during pre-sampling monitoring, previous monitoring/sampling events, site assessment results, or similar data.

Discharge waters are to be inspected to assess for the possibility of contamination of the samplers (e.g., the presence of odours in discharged waters where none had been observed during previous samplings).

Purging

For a well that is screened across the water table, set the pump intake approximately 0.5 m below the initial static water surface level. Otherwise, set the pump intake at the approximate midpoint of the screened interval.

Water is to be purged from the well at a rate between 0.1 to 0.5 L/min. (0.1 L/min = 500 mL in 5 minutes and 0.5 L/min = 2.5 L in 5 minutes). If the pump does not have a flow meter, check the flow rate by pumping into a container of known volume and record the time to fill it. Do not use the flow-through cell to check flow rate.

Water levels should be monitored to ensure that excessive drawdown does not occur within the well (the height of the water column in the well does not drop by more than 25% during purging). To the extent possible, the pump flow rate should be adjusted to maintain a constant water level within the well during purging.

Geochemical parameters should be measured using the multi-meter and flow-through cell assembly approximately every 3 to 5 minutes.

Purging is considered complete once the monitored parameters have "stabilized" for a minimum of three consecutive readings (parameters are within the ranges shown below of the previous reading) and at least one standpipe volume of water (calculated as the volume of water in the well standpipe prior to the commencement of purging) has been removed from the well. Note that dissolved oxygen may not stabilize in all situations; if all parameters other than dissolved oxygen have stabilized for a minimum of five consecutive readings, purging may be considered complete.

Geochemical stabilization Requirements

pH units	+/-0.2
Conductivity	+/-3%
ORP/redox	+/-20 mV
Dissolved Oxygen	+/-0.2 mg/L

(Source: ASTM Standard D6771)

It is not necessary to wait for groundwater levels in the well to recover before recovering samples for laboratory analysis.

Alternative Purging Criteria

Purging may cease once three times the initial volume of water in the well has been removed, regardless of whether the monitored parameters have stabilized, and groundwater samples may be collected. It is not necessary to wait for groundwater levels in the well to recover before recovering samples for laboratory analysis. The reason for ceasing purging should be recorded.

(Well volumes are calculated on the basis of the well standpipe; the volume of any water in the sand pack surrounding the well screen is not included in the calculation of the initial volume of water. For a 2 inch (50 mm) nominal diameter well, one well volume is approximately equal to 2 L per metre of standing water.)

If excessive drawdown cannot be avoided during purging (i.e., the water column height in the well drops more than 25%, even at a purge rate of 0.1 L/min), the well should be purged until a minimum of three times the initial volume of water in the wells has been removed. The well should then be permitted to recover; purging will be considered complete once the well has recovered such that the volume of water in the well is at least 50% of its initial volume.

If the well does not yield three volumes of water (e.g., the well is purged "dry"), the well should be allowed to recover so that the volume of water in the well is at least 50% of its initial volume, and then purged "dry" once more. The well should then be permitted to recover again; purging will be considered complete once the well has recovered such that the volume of water in the well is at least 50% of its initial volume.

Volumes purged, points at which the well went "dry" (if applicable), and well recovery (water height) are to be recorded.

Sampling

Wells are to be sampled immediately following purging (and recovery, if applicable). Sampling is to be completed by disconnecting the flow-through cell and adjusting the pump flow rate to collect groundwater samples into standard laboratory supplied containers for analysis at a steady rate, and under laminar (not turbulent) flow conditions.

Where more than one sampling container is required, filling should be conducted concurrently, alternating filling so that the containers contain the same "mix" of water (e.g., avoid filling bottles sequentially). Turbulent flow conditions should be avoided to minimize loss of volatile or semi-volatile parameters. Vials and bottles should be filled until a convex water surface occurs at the top of the vial or bottle, and the cap carefully placed on the sampling container.

Vials filed for testing of volatile compounds should be inverted (turned upside down) to examine for the presence of air bubbles. If significant bubbles are present, the cap should be removed and additional water added. When using sampling vials pre-charged with sample preservative, no more than two additional attempts to remove excessive bubbles through the addition of extra water are to be made; if after the second attempt significant bubble remain in the sample, the vial should be discarded and another vial filled to mitigate unacceptable preservative loss/dilution in the sample.

Always be aware of the preservatives in the bottles, for safety reasons (they are generally acids) and so that you do not inadvertently wash them out.

To mitigate potential cross-contamination:

- always don fresh latex/nitrile gloves for each sample collection;

- do not allow the sampling equipment to touch sample bottles (preservatives from one bottle may be a “contaminant” for another bottle)
- use dedicated sampling equipment to the maximum extent possible;
- decontaminate non-dedicated monitoring equipment between samples; and,
- Wells should be sampled beginning with “least” impacted and progressing to the “most” impacted wells to minimize cross-contamination potential. The determination of relative impact should be made using information obtained during pre-sampling monitoring, previous monitoring/sampling events, site assessment results, or similar data.

Recovered samples are to be placed in a closed cooler with ice immediately after collection, and maintained in a secure environment to prevent accidental or deliberate tampering.

Field Filtering

Groundwater samples collected for analyses of metallic parameters (including hydride metals, hexavalent chromium, and mercury, but excluding methyl mercury) are to be field filtered during sample collection using dedicated 0.45 µm in-line filters. Groundwater samples for other analyses, including inorganic analyses, are not to be field filtered.

The purpose of filtering groundwater samples for metals analysis is to remove particulate before acidifying the water, so that the acid does not extract metals contained within the particulate.

Each filter is to be fitted to the discharge point of the inertial foot-valve during purging such that a minimum volume of water equal to three times the volume of the filter passes through the filter before sampling containers are filled. In-line filters cannot be re-used. A new filter is required for each well, and each sampling event.

Submission to contract laboratory

All samples are to be packed in coolers with loose ice and appropriate packing materials to mitigate potential breakage during shipment to the contact laboratory. All shipments must be accompanied by completed and signed Chain of Custody form placed inside the cooler. The date and time for each sample recovery is to be recorded on the Chain of Custody.

Each cooler is to be secured with Custody Seals affixed in such a fashion that the cooler may not be opened without breaking one or more of the Custody Seals.

QUALITY ASSURANCE / QUALITY CONTROL SAMPLES

QA/QC sample requirements are specified in SOP E12.00, *Field Program Quality Assurance & Quality Control*.

FIELD DOCUMENTATION

Groundwater sampling should be recorded on the Low Flow Purging and Sampling field form. The form must be filled out completely, and dates should be recorded such that the month, day, and year of the sampling event is unambiguous (e.g., use Feb. 3, 2011, rather than 03/02/11).

Any irregularities or conditions suggestive of possible bias observed during sampling (e.g., sediment within recovered groundwater samples) should be recorded on the form.

TERRAPEX STANDARD OPERATING PROCEDURE
SOIL SAMPLE HANDLING

GENERAL NOTE

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

These procedures are applicable to intrusive investigations involving the collection of soil samples for the purposes of environmental assessment. The SOP is also applicable to work programs that involve the collection of samples of materials that are not technically soil, but which are soil-like, including sediments, regolith, and engineered granular materials.

It should be noted that this SOP addresses general requirements related to soil sample handling (e.g., once a sample has been recovered). Specific requirements related to sample collection methodology, including sample nomenclature and documentation, are provided in SOPs related to these sampling approaches. Additional information relating to sample description and quality assurance and quality control requirements for soil sampling programs are provided in SOPs E10.00 (*Soil Classification*) and E12.00 (*Field Program Quality Assurance & Quality Control*), respectively.

EQUIPMENT

The following list details standard equipment used in the sampling of soil or soil-like materials. Specific sites may require additional or specialized equipment.

- ☐ Gastech™ 1238ME, calibrated and charged
- ☐ Gastech™ field calibration kit, if applicable
- ☐ tape measure (preferably weighted flexible tape)
- ☐ trowel or knife for sampling from bucket

- ☐ sampling equipment (gloves, bags, permanent marker)
- ☐ laboratory-supplied sampling jars appropriate for contaminants of concern
- ☐ laboratory chain of custody forms
- ☐ field notebook
- ☐ site plan
- ☐ Sampling Plan (scope of work/field work instructions)
- ☐ site-specific health and safety plan
- ☐ Personal Protective Equipment (hard hat, vest, safety glasses, respirator, steel toe boots)
- ☐ camera

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Above ground and underground utilities and other services within the assessment area are to be located and identified in the field prior to intrusive sampling. Where appropriate, a private locating contractor should also be retained to identify secondary services such as yard lights, internal computer/communication lines, etc. and clear proposed sampling locations. All exclusions or conditions attached to utility service locates (e.g. notification requirements, “hand dig only” areas) are to be strictly adhered to.

Requirements outlined in the SOP specific to the sampling methodology are to be adopted during sample collection. To mitigate potential cross contamination, new disposable gloves are to be donned for the collection / handling of each sample, and any non-dedicated sampling equipment washed and rinsed prior to use.

Recovered samples should be identified using the nomenclature requirements outlined in the SOP specific to the sampling methodology. Available information relating to previous intrusive sampling programs at the site (including those by parties other than Terrapex) should be reviewed to ensure that sample identifications employed during the work program are unique; in some instances this may require advancing standard Terrapex sampling counts to address sampling identifications used by third parties during earlier investigations (e.g., if another consultant has already advanced boreholes identified as BH1 through BH10, the first round of Terrapex boreholes should begin at BH101, even though this is normally the count for the second round of Terrapex boreholes).

DISCRETE SAMPLES

Recovered samples are to be split into two portions; one portion is to be placed in a clear sealable sampling bag for field logging and screening, while the second portion is to be retained for possible laboratory analyses.

Portions for (Possible) Laboratory Analyses

If contaminants of concern / potential contaminants of concern for the sampling program include volatile constituents (see below for a detailed list of these parameters), the portion of the sample for possible volatile laboratory analyses is to be collected using a hermetically sealed sampling device (e.g., En Core Samplers) or placed directly into laboratory-supplied sampling containers pre-charged with sample preservative.

Samples (or portions of samples) for other analyses should either be placed directly into laboratory-supplied sampling containers appropriate for the intended/potential analyses, or should be placed in a second sealable sampling bag (i.e., a sampling bag other than the bag in which the portion for field screening and logging was placed) without headspace for subsequent transfer to laboratory-supplied sampling containers once samples for laboratory analyses have been selected).

If it is possible to accurately return to the sampling location, it is also acceptable for initial sampling to be completed for field screening and logging purposes only, with the portion of the sample for laboratory analyses recovered at a later time. In such an instance, samples for laboratory analyses are to be collected directly into laboratory-supplied sampling containers. This approach is generally only applicable during the collection of samples from open excavations (remedial excavation work programs, tank removals, etc.).

From a purely technical perspective, the preference for sample collection methodologies (from most preferred to least preferred) is:

1. Collection directly into laboratory-supplied sampling containers concurrently with collection of the portion of the sample for field screening and logging.
2. Initial sampling for field screening and logging only, and returning to the sampling location at a later time to sample for the purposes of laboratory analyses.
3. Collection into sealable sampling bags concurrently with separate bags collected for the portion of the sample for field screening and logging and the portion of the sample for laboratory analyses.

To the extent practicable during the work program, the technical preference outlined above should be adhered to. The sampling methodology employed for each sample should be recorded in the field notes, and included as part of the report documenting the work program.

If the third approach is selected the sampling bags should be managed while in temporary storage as would any other sample (refer to SOP E12.00, *Field Program Quality Assurance & Quality Control*), and should not be manipulated or otherwise disturbed until the bag contents are to be transferred to laboratory-supplied sampling containers for submission to the contract laboratory. When transferring the sample from the sampling bag to the laboratory-supplied sampling

containers, efforts should be made to select portions of the sample from the interior of the bag (i.e., not in contact with the sides of the bag) and avoid undue manipulation of the sample.

Sample submissions to the contract laboratory should NOT be prepared using material placed in the sampling bag for field logging and screening (see below), as this activity involves significant manipulation of the recovered sample.

Field Screening and Logging

Logging is the process by which individual samples are recorded (documented). Logging also includes classifying / describing the sample for the purposes of determining overall site stratigraphy.

Samples are to be logged using the appropriate field form (refer to the SOP specific to the sampling methodology), and classified / described as per SOP E10.00, *Soil Classification*.

Detailed examination and logging of samples requires some time, and is often completed at the conclusion of sampling activities. This practice is acceptable, but any information relating to structural or similar details (e.g., bedding, orientation of clasts within soil matrix) likely to be lost during movement of the bag and/or manipulation of the sample during field screening will need to be logged immediately at the time of sample collection.

Field screening is the process by which samples are qualitatively assessed for evidence of chemical impact, often to assist in the selection of samples for quantitative chemical testing by a contract laboratory. As field screening information is often gathered concurrently with field logging of recovered samples and is recorded on field logs, the distinction between field logging and field screening is subtle.

The components of field screening include:

- Measurements of vapours within the headspace of the sealable sampling bag containing the portion of the soil sample for field screening and logging (sometimes referred to combustible soil vapour measurements or CSV measurement);
- Examination of the sample for visual evidence of possible chemical impact (e.g., staining, presence of debris or other inclusions); and,
- Examination of the sample for olfactory evidence of possible chemical impact; and,
- Evaluation of the sampling location (both horizontally and vertically) with respect to the conceptual site model (e.g., proximity to underground storage tanks or other areas of potential environmental concern, relative positioning to the groundwater table or other contaminant fate and transport factors).

Typically, the selection of soil samples for laboratory analyses will be based on the results of the field screening process. On occasion, samples may also be selected to address specific work program objectives (e.g., duplication of previous results, re-evaluation of specific sampling locations), regardless of field screening results, however, field screening of recovered samples is still to be completed in such instances.

Procedures for measuring headspace vapours within the sealable sampling bag are described below.

Observations regarding visual and/or olfactory evidence of possible chemical impact are to be recorded in the sampling log. Where staining is present, describe both the apparent colour and the distribution of the staining (e.g., throughout the soil matrix, or within fractures). Odours are described using NONE, SLIGHT, MODERATE or STRONG, along with a description of the type of odour (e.g., hydrocarbon, organic, etc.).

DUPLICATE SAMPLES

A field duplicate is a second sample concurrently collected from the same location as another sample and submitted for duplicate analyses to provide quality assurance information during sampling programs (refer to SOP E12.00, *Field Program Quality Assurance & Quality Control*).

Field duplicate samples should be recorded in the field notes using their assigned sample nomenclature, along with their corresponding sampling pair. When possible, sample duplicates should be subjected to field screening and logging procedures, although limited sample volume may occasionally preclude such efforts.

COMPOSITE SAMPLES

Composite samples are ‘prepared’ samples; that is they are created by Terrapex out of two or more discrete samples. Composite samples may only be prepared using samples collected from the same depth, and that are located within a single 2 m horizontal radius.

Composite samples should be prepared by placing approximately equal volumes of each contributing discrete sample in a stainless steel bowl and blending the samples together such that the individual samples can no longer be visually distinguished from one another. It should be noted that compositing cohesive soils or very dense cohesionless soils may be impracticable at some sites.

The composite sample should be recorded in the field notes (e.g., on the sampling log), noting each of the contributing discrete samples incorporated within, with the time and date of the composite "sampling" being that when the sample was created. Composite soil samples are NOT to be classified per SOP E10.00, *Soil Classification*, nor are they subject to the field screening procedures applicable to discrete soil samples.

Composite soil samples should not be submitted for laboratory analyses other than metallic (with the exception of mercury and methyl mercury, which are volatile parameters) or general chemistry (inorganic) parameters.

SPECIAL CONSIDERATIONS, SAMPLES FOR ANALYSES OF VOLATILE CONSTITUENTS

To minimize potential losses through off-gassing, soil samples for analyses or potential analyses of volatile constituents are subject to special handling requirements as outlined in Table 1, below.

Table 1 Soil Sampling Requirements, Analyses for Volatile Constituents

Parameter(s)	Notes
Mercury, Methyl Mercury	Samples to be packaged in glass, high density polyethylene (HDPE), or polyethylene terephthalate (PET) container without headspace. Note that it is not necessary to prepare additional sampling containers for mercury and/or methyl mercury analyses if analyses of other metallic compounds are also being completed for the sample.
Volatile Organic Compounds (VOCs)	Samples are to be collected using hermetically sealed sampling device (e.g., En Core Samplers) and submitted to the laboratory for receipt within 36 hours of sample collection. The sampling devices may need to be accompanied by a portion of the sample placed in a glass jar to permit moisture content determination; **OR**, Each sample is to be placed into sampling containers pre-charged with methanol preservative (note that a second container may be required by the laboratory to facilitate laboratory QA/QC; verify requirements with the contract laboratory). The methanol-preserved samples must be accompanied by a portion of the sample placed in a glass jar to permit moisture content determination.
Bromomethane (also known as methyl bromide)	Where the collection of soil samples employ methanol preservative and where bromomethane is a contaminant of concern, a separate sample (collected either using a hermetically sealed sampling device, or collected into a container pre-charged with sodium bisulphate solution preservative) may be required to achieve appropriate detection limits.

Parameter(s)	Notes
Trihalomethanes (THMs)	THMs are technically VOCs, but since they are primarily related to chlorination of drinking water they may also be considered separately. Requirements for general VOCs apply to THMs. Note that it is not necessary to prepare additional sampling containers for THMs if general VOC analyses are also being completed for the sample.
1,4-Dioxane	1,4-Dioxane is typically an additional analysis to a general VOC analyses, or an additional analysis to an analyses of acid/base/neutral compounds. It is not necessary to collect additional sampling containers when 1,4-Dioxane analyses is to be completed as an addition to either VOC or acid/base/neutral compound analyses. When collected as an addition to acid/base/neutral compound analyses, the sampling requirements of that analysis apply. When completed as an addition to general VOCs analyses, the sampling requirements for general VOCs apply. When a soil sample is collected specifically for analysis or potential analysis of 1,4-Dioxane (e.g., and not also for analyses of VOCs or acid/base/neutral compounds), the requirements for general VOCs apply (see above).
Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	BTEX can be determined as part of a general VOC analyses, or as a targeted analyses only for these parameters (typically in combination with the F1 parameter and accompanied by samples for analyses of the F2 to F4 parameters). When soil samples are being collected specifically for analyses or potential analyses of BTEX, the requirements for general VOCs apply (see above).
F1 Petroleum Hydrocarbon (PHC) parameter	Requirements for general VOCs apply to the F1 parameter. Note that it is not necessary to prepare additional sampling containers analysis of F1 if BTEX or general VOC analyses are also being completed for the sample.
F2 to F4 PHC parameters (includes gravimetric determination of F4 parameter)	Samples to be packaged in glass jar without headspace and sealed using polytetrafluoroethylene (PTFE, or “Teflon”) lined cap.

HEADSPACE VAPOUR SCREENING

Headspace vapour screening is completed using portable gas monitoring devices (or meters), with the most common devices being catalytic bead combustible gas meters (e.g., Gastech 1238 ME, RKI Eagle, RKI NP-204) and photo ionization detectors (PIDs).

The selection of the specific gas monitoring device is determined during development of the Sampling Plan. Generally, PIDs are employed at locations where volatile compounds are considered to be contaminants of concern. However, if volatile contaminants of concern are restricted to petroleum hydrocarbons (PHCs), a combustible gas meter calibrated to n-hexane will typically be selected over a PID, due to their relatively greater 'sensitivity' to PHC compounds. Combustible gas meters calibrated to methane may also be used at locations where elevated natural gas levels are a concern or potential concern.

Some combustible gas meters are equipped with a "methane elimination" toggle that, when activated, reduces the response of the instrument to methane gas. However, it should be noted that the switch does not truly eliminate contributions of methane gas to the overall combustible gas reading; where significant methane is present, the gas meter may still report significant overall combustible gas levels, even in the absence of any other gases.

Methodology

1. Field screening is to be completed using portable gas monitoring meters that have been appropriately calibrated (refer to SOP E01.00, *Field Meter Calibration*).
2. The sampling bag containing the portion of the sample for field screening is to be tightly sealed with a nominal headspace, and any clumps within the sampling bag are to be gently broken by manually manipulating the sealed sampling bag.
3. The sampling bag should is not be opened or pierced until headspace vapour screening has been completed.
4. Once the sample has reached a temperature approximately between 5ºC and 15ºC and within two hours of sample collection, the tip of the portable gas monitoring meter is to be inserted into the nominal headspace of the sampling bag to record headspace vapour levels. The tip is to be inserted in a manner that does not permit vapours within the sampling bag to vent to ambient air during measurement.
5. The sample should be gently manipulated, and the peak reading registered by the meter during the first 15 seconds of measurement should be recorded as the sample headspace vapour reading.

TERRAPEX STANDARD OPERATING PROCEDURE
SOIL CLASSIFICATION

GENERAL NOTE

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

These procedures are applicable to intrusive investigations involving the completion of localized excavations for the purposes of collecting soil samples and/or documenting subsurface conditions. The procedures are applicable whether such activity constitutes the whole of a work program, or part of a larger work program.

PRESENTATION OF DESCRIPTION

Soils descriptions will be presented in the order specified below:

- Texture Descriptive (applicable for sands and gravels only)
- Major Constituent (principal grain size)
- Minor constituents (major to minor, largest to smallest if same %).
  - include organics after minor constituents
- Colour
- Moisture Descriptive
- Consistency Descriptive (only where appropriate field tests are conducted)
- Plasticity (if applicable)
- Other Modifiers, e.g. laminated, uniform, fissured, etc. (If applicable)
- Odours, where applicable, i.e., slight, moderate, strong with odour type (e.g., earthy, hydrocarbon, etc.)

CLASSIFICATION BY PARTICLE DIAMETER

Description	Range	Notes
BOULDERS	> 300 mm	
COBBLES	75 to 300 mm	
GRAVEL		
Coarse	19 to 75 mm	
Fine	4.75 to 19 mm	
SAND		
Coarse	2.0 to 4.75 mm	individual grains are visible to naked eye; refer to examples for texture descriptive
Medium	0.425 to 2.0 mm	
Fine	0.075 to 0.425 mm	
SILT	0.002 to 0.075 mm	individual grains not visible to naked eye; other methods necessary to mores specifically identify distribution/type of fines
CLAY	< 0.002	

DESCRIPTION OF CONSTITUENT PARTS OF A SOIL

Soils will be principally described on the basis of the largest particle size classification by percentage of particles (e.g. sand, silt), with the dominant texture descriptive, where applicable (e.g. coarse sand). Where two or more classifications are present in approximately equal amounts, the sample will be principally described using the constituents presented from largest to smallest and joined by “and” (e.g. “sand and silt”).

Where two or more texture descriptives are present in approximately equal amounts, the sample will be described using the descriptives presented from largest to smallest and joined by “and” (e.g. “coarse and medium sand”).

Minor constituents are described using the terms defined below

Descriptive Term	Range of Proportion
Trace	1-10%
Some	11-20%
Adjective (i.e. sandy, silty)	21-35%
And	36-50%

COLOUR

Generally soil is described using BROWN, GREY, OLIVE.

Use qualifiers such as LIGHT, DARK, or combination terms like REDDISH-BROWN, BROWN/BLACK

Where more specific colour references are required, scientific colour descriptors from the Munsell Colour Chart should be used.

MOISTURE DESCRIPTIVE

- DRY - absence of moisture
- MOIST - damp, but no visible water
- WET - damp, contains visible water
- SATURATED - soil is completely wetted to excess and may be dripping

CONSISTENCY OF COHESIONLESS SOILS

The standard terminology to describe cohesionless soils (i.e., gravel, sand, or silt) includes the compactness as determined by laboratory test or by the Standard Penetration Test 'N' value.

Descriptive Term	Density Index	Standard Penetration Test (blows per 300 mm)
Very Loose	0-20%	0 - 4
Loose	20-40%	5 - 10
Compact	40-70%	11 - 30
Dense	70-90%	31 - 50
Very Dense	90-100%	over 50

CONSISTENCY OF COHESIVE SOILS

The standard terminology to describe cohesive soils (i.e., clay, or soil containing significant clay content) includes the consistency, which is based on undrained shear strength as measured by in-situ vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Descriptive Term	Standard Penetration Test (blows per 300 mm)	
Very Soft	Less than 2	penetrate w/fist
Soft	2-4	indent w/fist
Firm	5-8	penetrate w/thumb
Stiff	9-15	indent w/thumb
Very Stiff	16-30	indent w/thumbnail
Hard	over 30	can't indent

Consistency Limits of Cohesive Soil

Applicable if geotechnical laboratory tests are completed.

Descriptive Term	Plasticity Index
Non-plastic	0 - 3
Low plastic	4 - 9
Medium plastic	10 - 30
Highly plastic	over 30

FIELD TESTS FOR COHESIVE SOIL

For determining relative clay content.

Dilatancy – "none", "slow", or "rapid"

Pat of wet soil is shaken in the palm of the hand and alternately squeezed and released. Predominantly silty materials will show a dull, dry surface when squeezed and a glassy wet surface when released/shaken (dilatent). This characteristic becomes less pronounced with increasing clay content, as clays are not dilatant.

Plasticity from thread test – "none", "low", "medium", or "high"

Attempt to roll a 3 mm thread of soil on a flat surface with the palm of your hand, adding as much water as necessary. Fold the thread and roll until it crumbles. (Note: silts can be plastic as well as clays so this is not a definitive test of particle size.)

- NON-PLASTIC - thread cannot be rolled
- LOW PLASTICITY - thread can barely be rolled
- MEDIUM PLASTICITY - thread can be rolled, but not re-rolled
- HIGH PLASTICITY - can be easily rolled and re-rolled

OTHER MODIFIERS

Sorting

Sorting is a geological term that describes the relative range of particles sizes.

- POORLY SORTED - a wide range of particle sizes is present
- WELL SORTED - a narrow range of particle sizes is present

Sorting is analogous to the geotechnical concept of “grading”, except that opposite descriptors are used (e.g. a poorly sorted soil, geologically, is considered a well graded soil, geotechnically). Geological descriptors are to be used for environmental descriptions of the relative range of particle sizes.

Angularity of Particles

- ANGULAR — Many corners/pointed parts, not smooth
- SUB-ANGULAR — Between angular and rounded
- ROUNDED — Rounded and generally smooth, no corners or pointed parts
- WELL-ROUNDED — Very round and smooth

DESCRIPTIVE SOIL TERMINOLOGY

These terms may be used, where applicable, to further describe soils.

TILL	An unstratified, unsorted glacial deposit of clay, silt, sand, gravel, cobbles and boulders in any combination. Typically dense and heterogeneous.
FILL	Any materials below the surface identified as placed by humans. “FILL (PRESUMED)” may be used when a stratigraphy is suspected as being fill, but the author also wishes to convey uncertainty regarding the accuracy of this determination.
TOPSOIL	Weathered surface materials which are capable of supporting plant life.
INCLUSION	An anomalous substance or fragment incorporated in a soil or rock mass.

STRATIFIED	Containing layers of different soil types (more than 3 mm thick).
LAMINATED	Composed of thin layers (less than 3 mm thick) of varying color and texture.
DESICCATED	Dried by moisture evaporation - desiccated clays are sometimes described as fissured or having nugget structure.
FISSURED	Containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.
SENSITIVE	Exhibiting loss of strength on remolding.
FRIABLE	A soil consistency term pertaining to the ease of crumbling of soils. Easily crumbled between the fingers.
CALCAREOUS	Containing appreciable quantities of calcium-carbonate.
LAYER	> 75 mm in thickness
SEAM	2 mm to 75 mm in thickness
PARTING	< 2 mm in thickness
VARVED	Composed of regular alternating layers of silt and clay, often manifesting as alternating light and dark colouring, each usually between 25 and 75 mm in thickness, typically resulting from alternating seasonal deposition in a lacustrine environment.

TERRAPEX STANDARD OPERATING PROCEDURE
MEASURING AND SURVEYING USING TOTAL STATION

GENERAL NOTE

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

These procedures are applicable to obtaining basic site dimensioning information, including determining reference elevations using a total station survey instrument. The procedures are applicable whether such activity constitutes the whole of a work program, or part of a larger work program.

These procedures are not applicable to legal surveying, or the use of Rod and Level survey instruments.

EQUIPMENT

The following list details the standard equipment necessary for surveying using a Total Station. Specific sites may require additional or specialized equipment.

- □ total station
- □ tripod
- □ survey rod
- □ prism
- □ field notebook
- □ 2-way walkie-talkie radios
- □ 30 m tape measure (for small sites)

- □ measuring wheel (for large sites)
- □ safety equipment (hard hat, boots, safety vest, safety glasses)
- □ chalk and/or spray paint
- □ nails and flagging tape (for setting control points)
- □ hammer and chisel (for making control points or benchmarks)
- □ traffic control equipment (pylons, traffic signs), if applicable
- □ site plan
- □ site-specific health and safety plan
- □ Traffic Control Plan and Road Occupation Permit, if applicable

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Traffic spotters should be employed when surveying or dimensioning activities include locations located in the travelled portion of a roadway or in high traffic areas. A traffic control plan in accordance with Ontario Ministry of Transportation (MTO) guidelines must be implemented for all work in road allowance.

DEFINITIONS

Occupy Point: The point on which the total station is setup is generally given the coordinates

N: 1000.000

E: 1000.000

Z: 100.000

Height of Instrument: is measured rather than calculated when using the total station. The height of instrument is measured by placing a tape on the occupying point – this is not necessarily the ground elevation. For example a nail may be used in a grassy area that is left above grade to make it easier to find, the height of instrument must be measured relative to the nail and not the ground.

Site Benchmark: semi-permanent structure or point of known or assumed elevation. Examples include:

- Fire hydrant shoulder joints (top bolt should not be used)
- Centre of a catch basin
- Concrete pad of a hydro vault

- The base of a sign

It is preferable to use an existing geodetic benchmark so that elevations can be reported in meters above mean sea level (m amsl). Locations of geodetic benchmarks can be obtained from the municipality or from *Control Survey Information Exchange (COSINE)*.

If the elevation of the benchmark is assumed the total station will assign an elevation relative to the elevation assigned to the occupy point (i.e., the benchmark coordinates will be calculated automatically based on the instrument being at the coordinates 1000.000, 1000.000, 100.000).

Turning Points/ Control Points: a temporary point used to move around line of site obstructions. Typically a nail is installed and painted to mark the control point. The point number and coordinates for all control points should be recorded in the surveyor's field book for future reference.

Back Sights: a known point used to orient the total station after moving to a control point (typically another control point).

Fore sight/ side shot: a shot taken on any point where coordinates are required. Called an intermediate site in level rod surveys, in the total station software they are called side shots.

FIELD PROCEDURES

Basic Survey

Planning: It is essential to plan your survey before you begin.

1. Locate your Site Benchmark (can be a known geodetic point such as a brass cap, a former temporary site benchmark such as a fire hydrant or a new point of your choice if the site has not been surveyed previously). The site benchmark must be documented clearly in your field notes such that another tech is able to locate and use the same point that you did with confidence.
    a. All surveys begin with the benchmark so its location is important when planning the remainder of the survey.
2. Walk the site, locate all wells and features that are required for the survey. Pay attention to site lines and potential locations for turning points.
3. Establish your starting point (where the total station will be set up first ensuring that you can see the site benchmark).

Equipment Setup: Setup the total station.

**If you are setting up on an arbitrary point (i.e., a point that does not have known coordinates) you do not need to use the laser level however the leveling process is the same.*

1. Setup the total station
    a. Extend the tripod
    b. Screw the total station onto the tripod – one hand must be kept on the total station at all times until it is fastened to the base and the legs are spread such that the instrument will not fall over
    c. [*If setting up on an arbitrary point skip to step e]*Turn on the laser plummet (the laser plummet shows a small red dot on the ground to show where the station is centered.
        i. Turn on the total station
        ii. Hit the menu button
        iii. Scroll through and select *Laser Plummet*, Select 'On'

            -You should see a red dot on the ground. In some lighting conditions it can be challenging to see. If you cannot see it move your boot through the air under the total station until you see it on your boot and track it down from there. Alternatively you can shade the area with your leg to make the laser more pronounced in very sunny conditions.
    d. Place the laser on top of the point.
    e. Step down on all three the legs. DO NOT STOMP, stand and use all of your body weight to set the leg but do not stomp it with the total station attached.
    f. Recenter the laser on the point using the thumb screws.
    g. Rough level (disc/bubble level). This rough leveling should begin with the legs, unclamp one leg at a time and adjust its height to move the bubble. Repeat until the bubble is in the middle of the disc and the laser is on the point. You can loosen the screw holding the total station to the base plate and slide it to move the laser onto the point.
    h. Fine level (vial level – located just above the display screen). This process is very tedious:
        i. Rotate the total station so that the screen is resting above two of the thumb screws. Use only these two screws to place the bubble in the middle of the vial.
        ii. Turn the station so that it is at 90^0 from the first face. One side of the screen should be above the third screw and the other between the first two screws. Using only the screw that was not used adjust the level.

iii. Repeat this step until the station is level regardless of which way you turn it and the laser is directly on the point.

iv. Once level and over the point turn off the laser plummet.

i. Measure the height of the total station (HI) from the top of the point you are set up on to the marks on the side of the instrument. There is a line --o-- on both sides of the instrument, the height of instrument is measured to this line. Record the HI in your field book.

Survey Setup: Now that the total station is ready it is time to setup the survey on the onboard software.

4. Input job number:
    a. Hit the 'Menu' button
    b. Select 'Data Collect' → Input; input your project number
5. Input starting coordinates:
    a. Hit the Esc button to return to main screen
    b. Hit 'Menu' button
    c. Select 'Programs' → Z COORD. → DON'T USE → OCC PT INPUT → INPUT
        i. Input the following coordinates

        N: 1000.000

        E: 1000.000

        Z: 100.000
    d. ENTER
    e. Input the instrument height measured previously: INS. HT: ____
    f. Return to main menu by pressing ESC
6. Survey setup:
    a. Occupation Point:
        i. Hit 'Menu' button
        ii. DATA COLLECT your job number should be there, select it
        iii. OCC. PT# INPUT → PT# _____ ← 1 (your first point)

        ID: _____ ← ST (Start)

        INS. HT: ____ ← previously input double check it is your HI
        iv. Once all data is input hit 'REC' to save your occupation point coordinates

b. Backsight:

i. Select BACKSIGHT from main menu

BS# :_____ ← 2 (second point)

P.CODE :_____ ← BS (backsight)

R. HT :_____ ← Rod Height (default is 1.650m – double check!

ii. Rod person now places the rod on the selected Site Benchmark

iii. Surveyor sites the prism (aligning the crosshairs in the total station with the crows feet on the top and side of the prism) and hits MEAS → NEZ

1. Record values in field book – you will need the coordinates to close the survey (they can be accessed from another menu so don't panic when they flash quickly and disappear from the screen).

7. Tie in points: Your survey is now ready to go. You can begin shooting wells, buildings, etc…

a. Select FS/SS:

PT# :____ ← Next point is 3

P.CODE:____ ← whatever you are shooting (list to follow)

R. HT :____ ← Height of rod, can be changed to see over/below obstructions but must be changed here to the same as the rod.

i. This is the menu that you will shoot your points in.

1. Once all data is complete and the target is sited hit MEAS. → NEZ

b. Search for Point Data:

i. Select FS/SS

ii. SRCH; you will have a couple of options depending on what you need:

1. Last data: Takes you directly to the most recent point shot

2. First data: Takes you directly to the first point

3. Point #: Input the point number to be taken to its data

8. Close the survey:

a. While in the FS/SS mode shoot the backsight. Compare the coordinates from when you shot it at the outset of the survey. A vertical error (Z) of 3 mm is acceptable for total station surveys.

Turning Points

Turning points are required to maneuver the total station around line of sight obstructions. The procedure below illustrates how to do this.

1. Select the location for your Turning Point. Mark your turning point in a stable manner using a nail and paint is the ideal method however on sidewalks or inside buildings this is not possible. A paint dot with a cross carved into the paint suffices or a target drawn with permanent marker.
2. Select another location and mark it as well, this second location must be visible from both the current setup and turning point and will serve as the backsight for the total station once you have moved.
3. Shoot both locations, record the point numbers and coordinates in your field book for future reference.
4. Shoot your original backsight again to close this portion of the survey.
5. Move the total station to the desired turning point. Follow the setup procedure outlined above to level the total station directly over the point.
6. From the main menu select OCC. PT# INPUT → update the HI → OCNEZ → Input the point number that you are on
    a. Double check the coordinates with your field book to ensure you are at the right point
7. Return to the main Menu and select BACKSIGHT → confirm that the rod height is correct → BS → select your backsight point
    a. This point will serve as the benchmark for this portion of the survey
    b. Once you have input a point number double check that the coordinates are correct. You will then site the rod person at this point and measure it (option provided after selecting this point → MEAS?)
        i. Record the coordinates, they should be within 3 mm from the original coordinates. If not check that the total station and rod are both level and shoot again.
8. You can now continue your survey as normal.

To close a turning point simply shoot back to the point that you used as a backsight and compare to the coordinates recorded in your field book. 3mm is the acceptable error.

Known Benchmark

Using a benchmark of known elevation allows the surveyor to survey new points in relation to existing points. This process can also be used to start a survey on a geodetic benchmark so that elevations are reported accurately as elevation above sea level rather than relative to an arbitrary elevation (generally 100.000).

1. Follow equipment setup procedure outlined above.
2. Select PROGRAMS → Z. COORD → DON'T USE → OCC. PT INPUT

   N: 1000.000

   E: 1000.000

   Z: 100.000
3. Escape to the plain screen (no menus) and press the *3 ARROW BUTTON* on the right side of the total station display face
   a. Record the coordinates in your field book
4. Select PROGRAMS → Z. COORD → DON'T USE → REF MEAS
   a. Input the coordinates that you obtained from the previous step and the elevation of your benchmark

      N: Coordinate from step 3

      E: Coordinate from Step 3

      Z: Elevation of your benchmark
   b. Press ENT
   c. > Sight ? → YES
   d. Select the following: CALC → BS → SET → YES
5. Select DATA COLLECT → OCC. PT# INPUT
   a. Setup like normal (PT#1, PCODE: ST)
   b. REC

      N: 1000.000

      E: 1000.000

      Z: CALCULATED → This value was calculated in step 4.D and will appear automatically – it is the calculated elevation of the occupied point based on the elevation of the benchmark.
6. Select BACKSIGHT
   a. Setup like normal (PT# 2, PCODE: BM)
   b. Select MEAS. → NEZ

      N: Same as values input in step 4

      E: Same as values input in step 4

      Z: Same as values input in step 4

      i. Ensure that the elevation value is the same (+/- 3mm as your known benchmark elevation)

You can now proceed with your survey as normal. Procedures for shooting new points, turning points and closing the survey all remain the same.

P.CODE List: A list of appropriate codes for common site features:

DESCRIPTION	P.CODE
Start Point	ST
Back Sight	BS
Turning Point	TP
Control Point	CP
Check	CHCK
SITE FEATURES	P.CODE
Monitoring Well Ground Shot	MW***G
Monitoring Well Top of Pipe	MW***T
Borehole	BH***
Catch Basin	CB
Manhole	MH
Fire Hydrant	HYD
Building	BLDG

Other features can be described by typing the full name or an abbreviation of your choice so long as the P.CODE is recorded in your field book for future reference.

Downloading Survey Data:

In order to use the data collected while total station surveying you must download the data. This is accomplished using the surveying laptop. *It is important to keep up with your labels during these stages – ensure that downloaded and converted files are going into known locations – the software is not forgiving if you assume that it is going where you want it to.*

1. Connect the total station to the laptop using the USB cable found in the laptop bag.
2. Turn on the total station → Memory Manager → Data Transfer → Send Data → Mes. Data
3. Open SurveyLink on the laptop → Transfer → Send/Receive → Receive
    a. Output = RAW DATA
    b. A red dot should move between the computer and total station icons if things have been set up correctly
4. The base file has now been downloaded but needs to be converted into usable formats

Converting File Formats:

1. In SurveyLink click “Conversions” → “Convert File Formats” (a pop up window will appear)
2. Select Raw Data File → Topcon GTS210/310 Raw Data (format from the total station)
    a. Ensure that the input file name is the correct data
    b. Output Type: TDS Raw Data
        i. Ensure that the output file is in the same folder as your input
3. Click “Convert”
    a. The program will ask you for your starting coordinates – typically 1000.000, 1000.000, 100.000 but could change depending on the nature of the survey. This should have been recorded in your field notes.
4. The file format is now .rw5.
5. The next conversion is Raw Data File → TDS Raw Data and it gets converted to TDS Coordinates (sequential)
    a. The same process applies – make sure to keep track of where you are saving your files!
6. Next conversion is Coordinate File → TDS Coodinates to AutoCAD DXF
7. Put the folder containing all of the file formats onto a USB drive.

Generating the Coordinate Report:

The next step requires the use of ForeSight DXM – surveying software to generate the coordinate report.

1. Open your TDS Coordinate file (.cr5) from the conversions – it will open automatically with ForeSight DXM.
2. Highlight all wells/ points on the screen (click and drag) – points that have been selected will be highlighted yellow in the textbox below the screen.
3. Right click on the highlighted text and select ‘coordinate reports…’
4. On the left side of the screen click “View Report”
5. Right click the report and click ‘report’ – this will generate a text file
6. Save the text file as the CTxxx.xx Coordinate Report

TERRAPEX STANDARD OPERATING PROCEDURE
FIELD PROGRAM QUALITY ASSURANCE & QUALITY CONTROL

GENERAL NOTES

Standard Operating Procedures (SOPs) have been developed by Terrapex Environmental Ltd. to standardize protocols used during environmental assessment work programs. However, certain work programs may warrant deviations from SOPs and some clients may have specific requirements which differ from those outlined in this SOP. Any significant deviations should be discussed with and approved by the project manager. Each deviation, along with the rationale for the deviation, should be documented in the field notes, project scope and/or notes to file.

Where SOPs are appended to reports, all deviations from this SOP, along with the rationale for the deviation, must be documented in the report.

APPLICATION

This SOP is applicable to intrusive investigations involving the collection of soil, water, and air samples for possible laboratory chemical analyses, including sediment, groundwater, surface water, indoor air, outdoor air, and soil vapour. The SOP addresses only measures required for quality assurance and quality control purposes. Sample collection, nomenclature, documentation, and other requirements associated with specific sampling approaches (e.g., borehole drilling) are described in other SOPs.

SPECIAL PLANNING AND PREPARATION REQUIREMENTS

Liaison with the contract laboratory in advance of field programs will be required as the laboratory will normally be responsible for providing appropriate sampling containers, prepared trip blank and trip spike quality assurance samples, and appropriate analyte-free water for the preparation of field blanks and equipment blanks by Terrapex.

FIELD PROGRAM QUALITY CONTROL REQUIREMENTS

Sample Collection

Quality control measures during sample collection are primarily intended to mitigate the accidental introduction of a contaminant or the loss of a volatile constituent of the sample.

Specific requirements associated with sampling methods are defined in the SOP(s) applicable to those methods. General requirements for all work programs are described below:

- Sampling containers and field preservative (if applicable) will be obtained from the contract laboratory.
- Available information relating to environmental conditions at the site should be reviewed and, to the extent practicable, sampling should commence in the apparent least-impacted area and progress to areas of apparently greater impact, finishing in the apparent "worst-case" area.
- New disposable gloves are to be donned for the collection / handling of each sample.
- To the extent practicable, dedicated sampling equipment is to be employed during sampling collection; any non-dedicated sampling equipment which comes into contact with the sample must be thoroughly washed and rinsed prior to use.
- For water samples, sampling equipment (regardless of whether it is dedicated or non-dedicated) should be purged prior to sample collection by passing a minimum of three times the volume of the sampling equipment of either sample water or analyte-free water supplied by the contract laboratory through the equipment.

  For groundwater samples, purging of sampling equipment is typically completed concurrently with well purging (e.g., by employing the inertial sampler to be used during sample collection during the initial purging of the well).

  It should be noted that "sampling equipment" in this context does not include laboratory-supplied sampling containers.
- Water samples (including groundwater) are to be collected directly into laboratory-supplied containers appropriate for intended/potential analytical requirements; passing the sample through an in-line field filtration device prior to collection into the sampling container is an acceptable practice for samples that require field filtration.
- When more than one groundwater sampling container is involved and/or when duplicate groundwater samples are being collected, filing should be conducted concurrently, alternating filing so that the containers contain the same "mix" of water (i.e., avoid filling bottles sequentially).
- Soil and sediment samples are often split into two portions – one for field screening/logging, and one for (potential) laboratory analyses; to the extent practical, the sample portion for (potential) laboratory analyses should be immediately placed into laboratory-supplied containers appropriate for the intended/potential analytical requirements. Regardless, samples of soil potentially impacted by volatile or organic contaminants should be containerized immediately to minimize potential volatile loss.
- Samples collected for (potential) analyses of organic contaminants should not be subjected to extended contact with plastics.

Quality control measures are also required to ensure that a record of recovered samples, and the location from which they were obtained, is maintained. Specific requirements associated with sampling methods are defined in the SOP(s) applicable to those methods. General requirements for all work programs are described below:

- All recovered samples during a work program are to be assigned a sample identification that is unique during the work program, and sampling details – INCLUDING the time and date of sample collection – are to be recorded on field forms and/or in the field notes.
- In the case of soil or sediment samples, sample identifications are expected to be unique even over several work programs, including work programs that are completed by other parties. In some instances this may require advancing standard Terrapex sampling counts to address sampling identifications used or potentially used by third parties (e.g., if another consultant has already advanced boreholes identified as BH101 through BH110, the first round of Terrapex boreholes should begin at BH201, even though this is normally the count for the second round of Terrapex boreholes).
- In the case of water or groundwater samples, sample identifications are typically tied to a sampling location (e.g., a monitoring well identification), and it is quite common for several water samples (collected on different dates) to have been assigned a common identification. This is acceptable, provided that the date of sample collection is recorded in the field notes and included in work program documentation so as to create unique sample identification information.

Temporary Sample Storage

Temporary sample storage is required between the time of sample collection and the time of sample submission or when the sample is discarded. Quality control measures during temporary sample storage are primarily intended to mitigate the accidental introduction of a contaminant or the loss of a volatile constituent of the sample. Quality control measures are also required to maintain appropriate Chain of Custody of recovered samples.

- Samples must be labelled prior to being placed in temporary storage. Labelling must include the full sample identification, project number, and date of sample recovery on each container.
- Generally, samples are to be maintained in a cool environment, ideally 3 to 5ºC, and protected from direct exposure to sunlight (e.g., within a cooler with loose ice).
- Samples are not to be left unattended in a public space during storage. A public space includes any work site where access is not restricted by a fence or similar physical barrier to prevent unauthorized entry, even if the site is owned by a private corporation or individual.

Terrapex offices, locked vehicles, or work site trailers are not considered public spaces.

- Unpreserved samples submitted for laboratory analyses of VOCs / F1 PHCs and/or volatile gases should be received by the contract laboratory within 36 hours of sample collection (so as to permit the laboratory sufficient time to prepare sample extractions within regulated hold times). Samples submitted for all other analyses should be received by the contract laboratory within 72 hours of sample collection.

  Note that a sample collected using a hermetic sampling device (e.g., En Core sampler) is NOT considered to be preserved.

Sample Submission

Sample submission is the point at which Terrapex ceases to have custody of samples intended for laboratory analyses. This point may occur when the samples are released directly into the custody of the contract laboratory (i.e., hand delivered by Terrapex), or when the samples are released into the custody of a courier for delivery to the laboratory.

Quality control measures associated with sample submission are required to maintain sample integrity and appropriate Chain of Custody:

- Samples for submission are to be placed in an insulated packing container (e.g., a cooler) along with appropriate packing materials (e.g., bubble wrap) to mitigate breakage during transport to the contract laboratory. Do not overpack the cooler; distribute contents between coolers if needed to keep the mass of any cooler less than 20 kg.
- Seal each container tightly and place in sealed bags to prevent water from intruding into the sample and/or degrading the sample label. Group containers with the same sample ID within the same sealed bag. To the extent possible, place the bags into the cooler so that sampling containers sit upright.
- Loose ice is also to be placed in the cooler to assist in maintaining a cool internal temperature (ideally 3 to 5ºC).
- Sample submissions are to be accompanied by a completed Chain of Custody form. The Chain of Custody form is to be signed immediately before sealing the cooler, and placed inside the cooler within a sealed bag.
- Both the date and time of sample collection is to be recorded for each sample on the Chain of Custody form.
- If coolers are to be released into the custody of a party other than the contract laboratory (e.g., a courier), signed and dated custody seals must be placed on the cooler and secured in a manner that it is not possible to open the cooler without breaking one or more seals.

Sample submissions are also to be subjected to a quality assurance process involving a check of both the Chain of Custody and the cooler contents by a second person to ensure the Chain of

Custody is complete and consistent with the cooler contents. The second person shall record their quality assurance check by initialing the Chain of Custody form, ideally in the "Comments" section accompanied by a note indicating the purpose of the initials (e.g., "submission check by XX").

In instances where sample submission is happening directly from a field location at which a second Terrapex employee is not present, second person review should be completed via transmitted photographs or video conferencing. In such instances, the person who prepares the Chain of Custody should note the name of the remote reviewer, and the fact of the remote review, on the Chain of Custody form.

FIELD PROGRAM QUALITY ASSURANCE SAMPLES

Field Quality Assurance sample requirements for work programs are outlined below. These requirements are related to both the frequency of sample submissions (the number of samples submitted) as well as the duration of the field program.

The following terminology is used in defining sample requirements for this SOP:

- ***Field day*:** a work program to which this SOP applies that is completed in the space of a single calendar day.
- ***Sampling round:*** a work program to which this SOP applies that is completed over a period of one or more days, and which are associated with a single submission of samples to the contract laboratory. (Note that a single submission may constitute several coolers; "submission" refers to a batch of samples which are delivered to the laboratory at the same time.)
- ***Number of samples:*** for the purposes of this SOP, the number of samples for the work program comprises the sum of uniquely identified samples, excluding field program quality assurance samples, within each of the Analytical Program Groupings (refer to Table 1, below).

  For example, a work program involving the submission of three samples for VOC analyses with two of these three samples also submitted for analyses of metals would comprise a total of five samples, even though only three sample names might be listed on a chain of custody.

  The number of samples can be determined on both a field day and sampling round basis.

Table 1 Analytical Program Groupings, Quality Assurance Sampling and Analyses

Grouping	Analytical Protocol Section [1]	Notes
Acid/Base/Neutral Compounds (ABNs)	1.1.1	-
Chlorophenols	1.1.2	Not considered to be a separate grouping when analyses completed as part of ABN analyses
1,4-Dioxane	1.1.3	Not considered to be a separate grouping when analyses completed as part of ABN or VOC analyses
Dioxins/Furans, PCDDs/PCDFs	1.1.4	-
Organochlorine Pesticides	1.1.5	-
Petroleum Hydrocarbons (PHCs)	1.1.6	-
Polychlorinated Biphenyls (PCBs)	1.1.7	-
Polycyclic Aromatic Hydrocarbons	1.1.8	-
Trihalomethanes	1.1.9	Not considered to be a separate grouping when analyses completed as part of VOC analyses
Volatile Organic Compounds (VOCs)	1.1.10	-
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	1.1.11	Not considered to be a separate grouping when analyses completed as part of VOC analyses
Bromomethane	1.1.12	Not considered to be a separate grouping when analyses completed as part of VOC analyses
Calcium and Magnesium	1.2.1	-
Metals	1.2.2	-
Hydride-Forming Metals	1.2.3	Not considered to be a separate grouping when analyses completed as part of Metals analyses
Sodium	1.2.4	-
Other Regulated Parameters (ORPs)	1.3	Single parameter tests; each analysis is considered a separate grouping

1 *Protocol for Analytical Methods Used in the Assessment of Properties and Excess Soil Quality under Part XV.1 of the Environmental Protection Act*, Ministry of the Environment, Conservation and Parks (November 30, 2020)

Field Duplicates

A field duplicate is a second sample concurrently collected from the same location as another sample and submitted for duplicated analyses. Field duplicates provide information relating to:

- The ability of the contract laboratory to provide reproducible (i.e., similar or the same results) analytical results;
- The ability of Terrapex to consistently collect representative samples (as both the duplicate and its sampling pair are purportedly representative of the sampling location, similar results should be obtained); and,
- Homogeneity of the sampled media.

It is generally preferable to obtain field duplicate samples from sampling locations likely to generate quantified concentrations of the target parameters, as comparisons of quantified results is more informative than comparisons of non-detectable concentrations.

To mitigate potential bias in methodology, etc. at the contract laboratory, field duplicate samples should not be identified as field program quality assurance samples at the time of submission.

Field duplicate sampling requirements are provided in Table 2.

Field Blanks

Field blanks, whether they are accompanying soil, sediment, or groundwater samples, comprise a sample of analyte-free water prepared in the field and submitted for laboratory analyses as a measure of:

- The ability of the laboratory to avoid introducing concentrations of target parameters into analysed samples (i.e., potential analytical bias);
- The ability of Terrapex to avoid introducing concentrations of target parameters into recovered samples (e.g., cross contamination);
- Potential cross-contamination between samples during temporary storage and/or transportation to the contract laboratory; and,
- Potential cross-contamination between samples during temporary storage at the contract laboratory.

Analyte-free water for preparing field blanks should be obtained from the contract laboratory in bulk and transferred to appropriate sampling containers in the field. Ideally, a field blank sample should be prepared (or opened) adjacent to the “worst-case” sampling location. If this is impracticable, field blank samples should be prepared at another location in the field. Field blank

samples should not be prepared at the office or at the laboratory. The location at which a field blank sample was prepared should be recorded in the field notes.

To mitigate potential bias in methodology, etc., at the contract laboratory, field blank samples should not be identified as field program quality assurance samples at the time of submission. Consequently, because a field blank is by definition a water sample, field blanks are not normally part of soil sampling programs.

The exception to these general rules involves the use of methanol-preserved or sodium bisulphate solution-preserved soil samples for analyses of volatile organic constituents. Unused sampling containers precharged with preservative should be used as field blanks. The container(s) for the blank sample(s) should be opened, exposed to ambient atmosphere for approximately 30 seconds (the approximate time required to collect a soil sample into the sampling container), and re-sealed. It is not necessary, and not advisable, to attempt to transfer the preservative to another sampling container.

The “preparation” of the soil sample field blanks should be completed adjacent to the “worst-case” sampling location or condition; if this is impracticable, the activity should be completed at another location in the field at which bias of sampling results could have resulted. The location at which the soil sample field blank was prepared should be recorded in the field notes.

Field blank sampling requirements are provided in Table 2.

Trip Blanks

A trip blank is a sample prepared by the contract laboratory using analyte-free water and obtained by Terrapex immediately prior to the site visit. Trip blanks may also be prepared by the laboratory using methanol or sodium bisulphate solution for sampling programs involving soil samples for analyses of volatile organic constituents.

The trip blank sample accompanies Terrapex during the execution of the sampling activities and is not opened during this time. While in the possession of Terrapex, trip blanks are to be managed as if they were any other sample (e.g., maintained in a cool, dark environment as described above). At the conclusion of the sampling activities, the sample is submitted to the contract laboratory for analyses as a measure of:

- The ability of the laboratory to avoid introducing concentrations of target parameters into analysed samples;
- Potential cross-contamination between samples during temporary storage and/or transportation to the contract laboratory; and,
- Potential cross-contamination between samples during temporary storage at the contract laboratory.

As it is prepared by the contract laboratory, trip blanks will be received bearing a sampling label and associated sample identification. Reasonable efforts are to be made to limit the amount of time a trip blank sample is in possession of Terrapex (e.g., obtaining the sample is close to practicable to the start of sampling activities whilst ensuring it is in Terrapex's possession at the start). Regardless, the trip blank sample is to be received by the laboratory within seven days of the date/time of preparation listed on the sampling label.

Trip blank sampling requirements are provided in Table 2.

Equipment Blanks

An equipment blank is a sample prepared by exposing analyte-free water (supplied by the contract laboratory) to sampling equipment employed during the sampling activities (e.g., passing water through a bailer). Because the objectives of the equipment blank includes assessment of potential cross-contamination associated with the use of non-dedicated sampling equipment, non-dedicated equipment is to be washed in accordance with normal field procedures prior to preparing equipment blank samples.

Notwithstanding the objective of equipment blank samples, it should be noted that equipment blank laboratory results may also be affected by analytical bias or cross-contamination.

Equipment blanks should be prepared at the conclusion of the field day (as representative of "worst-case" cross-contamination potential when non-dedicated sampling equipment is used), as sampling is to commence in the apparent least impacted area and progress to areas of apparent increasing impact), and ideally in the field itself. The time and location of preparing each equipment blank sample is to be recorded in the field notes.

Equipment blank sampling requirements are provided in Table 2.

Trip Spikes

A trip spike is a sample prepared by the contract laboratory using water containing known concentrations of target parameters. The sample is obtained by Terrapex immediately prior to the site visit and accompanies Terrapex during the execution of the sampling activities, but is not opened. While in the possession of Terrapex, trip spikes are to be managed as if it were any other sample. At the conclusion of the sampling round, the sample is submitted to the contract laboratory for analyses.

Trip Spikes are primarily intended as measures of potential loss (low bias) in samples collected for volatile analysis, although results can also be affected by issues associated with laboratory analytical precision (e.g., laboratory equipment calibration) as well as potential cross-contamination between samples during temporary storage and/or transportation.

As it is prepared by the contract laboratory, trip spikes will be received bearing a sampling label and associated sample identification. Reasonable efforts are to be made to limit the amount of time a trip spike sample is in possession of Terrapex (e.g., obtaining the sample as close to practicable to the start of sampling activities whilst ensuring it is in Terrapex's possession at the start of the work program). Regardless, the trip spike sample is to be received by the laboratory within seven days of the date/time of preparation listed on the sampling label.

Trip spike sampling requirements are provided in Table 2.

Table 2 Field Program Quality Assurance Sampling Requirements

Sample Type	Media	Minimum Frequency	Comments
Field Duplicate [1]	Soil / Sediment	1 per 10 samples	Duplicates not required for TCLP extraction analyses
	Water / Groundwater	1 per 10 samples	
	Air / Soil Vapour	1 per 10 samples	
Field Blank [1]	Soil / Sediment	Generally not required [2]	A field blank is not required if a trip blank is being submitted (e.g., analyses of VOCs / F1 PHCs and/or volatile gases)
	Water / Groundwater	1 per sampling round	
	Air / Soil Vapour	1 per sampling round	
Trip Blank	Soil / Sediment	Generally not required [2]	Applicable only for analyses of VOCs / F1 PHCs and/or volatile gases
	Water / Groundwater	1 per sampling round (see comments)	
	Air / Soil Vapour	1 per sampling round (see comments)	
Equipment Blank [1]	Soil / Sediment	Generally not required [3]	Not required if only dedicated sampling equipment employed
	Water / Groundwater	1 per field day	
	Air / Soil Vapour	Not required	It is generally impracticable to attempt collection of equipment blanks during air or soil vapour sampling

Sample Type	Media	Minimum Frequency	Comments
Trip Spike	Soil / Sediment	Generally not required [4]	Applicable only for analyses of VOCs / F1 PHCs and/or volatile gases
	Water / Groundwater	Not required but 1 per sampling round recommended [5]	
	Air / Soil Vapour	Not required	Commercial laboratories are generally unable to provide reliable trip spike samples for air or soil vapour sampling

Notes:

1 To the extent practicable, at least one of each type of field program quality assurance sample should be submitted for the various analytical groupings that comprises the sampling program

2 A trip blank sample OR a field blank sample is required for each sampling round that includes methanol-preserved or sodium bisulphate solution-preserved soil samples for analyses of volatile constituents

3 Equipment blanks are not required if reasonable efforts are made to clean non-dedicated soil or sediment samplers between use (e.g., if split spoon samplers are washed between use, an equipment blank would not be required by this SOP). Otherwise, an equipment blank sample should be prepared by running laboratory-supplied analyte-free water over/through the equipment and collecting these waters for laboratory analyses of the target parameters.

4 Trip Spike samples are not required for soil or sediment analyses, as the laboratory-provided spikes are generally not provided in an equivalent media to the recovered samples (e.g., trip spike samples are generally water, and losses in a water sample may not be representative of the presence, absence, or magnitude of losses in hermetic samplers, methanol preserved samples, etc.)

5 Trip Spike samples are not required field program Quality Assurance elements per O. Reg. 153/04 and consequently are not mandatory per this SOP. However, as loss of volatile constituents during sample storage / transport to the analytical laboratory can significantly affect the reliability of analytical results, analyses of one trip per sampling round is recommended.

Nomenclature for Field Quality Assurance Samples

As a general practice, the contract laboratory should not be informed of the number or nature of field program quality assurance samples submitted as part of a sampling program unless the laboratory's assistance is required in investigating a potential data quality issue (e.g., in the event of a result triggering an alert criteria specified in Data Quality Analysis, below).

Notwithstanding this general principal, both trip blank and trip spike samples are typically prepared and provided by the contract laboratory. Accordingly, these samples will be assigned sample identifications by the laboratory, and the date/time of preparation will typically be recorded on the sampling label. Such samples should be recorded on the Chain of Custody form using the sample identification and date/time of preparation provided by the laboratory.

The remaining field program quality assurance samples (field duplicates, field blanks, and equipment blanks) should be submitted on a “blind” basis so that the laboratory ought to be reasonably unaware of the nature of the sample submission. That is, these samples should be assigned a plausible sampling identification that does not correspond to another actual or potential sampling location at the site, and the true nature of the sample identification recorded in the field notes. Selected sample identifications should not, for example, be identified as or include “DUP”, “BLANK”, or any other nomenclature suggesting that the sample represents a field program quality assurance measure.

This principal extends to field blanks prepared for methanol-preserved or sodium bisulphate solution-preserved soil samples for analyses of volatile constituents. Although field blanks may be readily identified as such at sample reception (through the lack of any soil within the sample container), the nature of such samples would not be readily apparent to other laboratory staff following laboratory extraction procedures. Accordingly, these samples should be assigned a plausible sampling identification that does not correspond to another actual or potential sampling location at the site, and the true nature of the sample identification recorded in the field notes.

LABORATORY QUALITY ASSURANCE

Commercial contract laboratories will have their own internal quality assurance and quality control programs. These programs typically include quality assurance samples in analytical runs, the results of which are provided (in summary form) in the Certificate of Analysis documenting analytical results for a sample submission.

Maintaining overall field program quality assurance and quality control and completing data quality analysis requires a review of the laboratory Certificate of Approval.

For the purposes of this SOP, laboratory quality assurance samples are defined as outlined below. Note that while this nomenclature had been adopted to reflect language typical in the commercial contract laboratory industry, it may not necessarily correlate exactly with that used in the laboratory Certificate of Analysis.

Method Blank: an aliquot prepared using analyte-free water and processed through the entire analytical method, including extracting, digestion, and other preparation procedures.

Blank Spike: an aliquot prepared using water containing known concentrations of target parameters and processed through the entire analytical method, including extracting, digestion, and other preparation procedures.

Matrix Spike: a second aliquot from an analytical sample that is fortified with known concentrations of the target parameters and processed through the entire analytical method, including extracting, digestion, and other preparation procedures. As quality assurance results

are assessed on the basis of comparison of the determined concentration versus the known concentrations, high concentrations of the target parameters in the fortified sample can obscure (mask) matrix spike recovery.

Laboratory Duplicate: a second aliquot from an analytical sample that is included in the analytical run for comparison to results from the corresponding sampling pair.

Certificate Reference Material (CRM): an aliquot that has been certified by a recognized agency to contain specific concentrations of target parameters and which is included in the analytical run. A CRM differs from a blank spike in that it is not prepared internally by the contract laboratory.

Surrogate Recovery: Surrogates are parameters not normally found in nature but that behave chemically and physically similar to the analytical run target parameters, and that are introduced into the aliquot of an analytical sample. Surrogate recovery is the evaluation of the determined concentration of the surrogate versus the known concentration introduced into the sample aliquot.

DATA QUALITY OBJECTIVES

Alert criteria for quality assurance and quality control metrics are summarized in Table 3. Any result triggering the specified alert criteria must be identified in the work program report, and specific commentary regarding the implication of this result on the work program findings (if any) offered.

Note that triggering an alert criteria does not mean that the corresponding laboratory results are invalid; it only indicates a situation where specific commentary regarding the validity of the laboratory results is required in the work program report.

Quality assurance samples involving comparisons of actual results to expected results are evaluated on the basis of ***Recovery***, or recovery percentage. Note that Recovery does not necessarily relate to the ability to provide consistent (similar) quantitations between successive analyses.

Recovery is calculated as follows:

$$Recovery = \frac{reported\ \ concentration}{actual\ \ (expected) concentration}\ \ x\ \ 100\%$$

Quality assurance samples involving comparisons of 'duplicate' analysis are evaluated on the basis of ***Relative Percent Difference (RPD)***. RPD provides a measure of the ability to provide consistent results on successive analyses, but does not necessarily relate to the ability to provide

results that are representative of the actual concentration of the target parameter (e.g., the expected result when comparing against a known standard).

RPD is calculated as follows:

$$RPD \quad = \quad \left| \frac{result_1 - result_2}{\frac{1}{2} \; x \; (result_1 + \; result_2)} \right| \; x \; 100\%$$

RPD values should not be calculated where one or both of the results do not yield quantifiable results (i.e., non-detect findings), or where one or both of the results are less than five times the reported detection limits. RPD values should not be calculated for parameters which are based on calculations using raw data (e.g., sodium adsorption ratio, total xylenes); instead, where applicable, RPD values should be calculated for the 'raw' data (e.g., the m&p-xylenes, o-xylenes parameters).

Note that the mere absence of a calculated RPD is not considered a quality assurance failure, but simply a situation where alert criteria cannot be quantifiably evaluated. Similarly, the absence of a RPD value is not necessarily considered to be an acceptable field quality assurance result (e.g., a non-detect result in a duplicate sample but an elevated concentrations reported for the corresponding sampling pair is suggestive of a potentially significant variance is sampling results, and may warrant commentary in the work program report).

Table 3 Field Program Data Quality Objectives

Field QC Metric	Alert Criteria
Sample integrity	Deviation from this SOP recorded within field notes Significant variance in field screening results (if applicable) recorded within field notes between duplicate samples Laboratory reports average sample temperature at time of receipt greater than 10ºC Incorrect sampling container employed Broken or leaking sampling container reported by laboratory Excessive particulate within received water sample reported by laboratory
Sample identification integrity	Laboratory reports discrepancy between samples reported on Chain of Custody and those actually received (as per sampling container labels) Laboratory reports unlabelled sample received (no sample identification apparent)
Chain of Custody integrity	Laboratory reports missing/damaged custody seal Laboratory reports missing Chain of Custody form Date/time of sample recovery not recorded on Chain of Custody form

Table 3 Field Program Data Quality Objectives

Sample storage (hold time) integrity	Sample for analysis of VOC / F1 PHCs and/or volatile gases received by laboratory more than 36 hours after recorded sample collection Sample for analysis other than VOC / F1 PHCs and volatile gases received by laboratory more than 72 hours after recorded sample collection		
Laboratory QA Metric	**Alert Criteria**		
	Analytical Grouping	**Soil / Sediment**	**Air / Soil Vapour / Water / Groundwater**
Method Blank	ALL	Any concentration in excess of laboratory detection limits	
Blank Spike, Matrix Spike		*results outside:*	*results outside:*
	BNAs, PAHs	50% - 140% Recovery [1]	50% - 140% Recovery [1]
	1,4-Dioxane	50% - 140% Recovery	50% - 140% Recovery
	Dioxins/Furans	50% - 150% Recovery	50% - 150% Recovery
	OC Pesticides	50% - 140% Recovery	50% - 140% Recovery
	PCBs	60% - 140% Recovery	60% - 140% Recovery
	PHCs	60% - 140% Recovery	60% - 140% Recovery
	VOCs	50% - 140% Recovery	50% - 140% Recovery
	Hg, Cr^{6+}, CN^-	70% - 130% Recovery	70% - 130% Recovery
	EC	n/a	n/a
	FOC, Chloride	70% - 130% Recovery	70% - 130% Recovery
	Methyl mercury	60% - 140% Recovery	60% - 140% Recovery
	Metals *(incl. B, HWS B, Ca, Mg, Na)*	70% - 130% Recovery [2]	70% - 130% Recovery [2]
Laboratory Duplicate	BNAs, PAHs	> 40% RPD	> 30% RPD
	1,4-Dioxane	> 50% RPD	> 30% RPD
	Dioxins/Furans	> 40% RPD	> 30% RPD
	OC Pesticides	> 40% RPD	> 30% RPD
	PCBs	> 40% RPD	> 30% RPD
	PHCs	> 30% RPD	> 30% RPD
	VOCs	> 50% RPD	> 30% RPD
	Hg, Cr^{6+}, CN^-	> 35% RPD	> 20% RPD
	EC	> 10% RPD	n/a
	FOC, Chloride	> 35% RPD	> 20% RPD
	Methyl mercury	> 30% RPD	> 20% RPD
	Metals *(incl. B, HWS B, Ca, Mg, Na)*	> 30% RPD [4,5]	> 20% RPD
	pH	[3]	[3]

Table 3 Field Program Data Quality Objectives

Certified Reference Material, Laboratory Control Sample		*results outside:*	*results outside:*
	BNAs, PAHs	50% - 140% Recovery [1]	50% - 140% Recovery [1]
	1,4-Dioxane	50% - 140% Recovery	50% - 140% Recovery
	Dioxins/Furans	50% - 150% Recovery	50% - 150% Recovery
	OC Pesticides	50% - 140% Recovery	50% - 140% Recovery
	PCBs	60% - 140% Recovery	60% - 140% Recovery
	PHCs	80% - 120% Recovery	60% - 140% Recovery
	VOCs	60% - 140% Recovery	60% - 140% Recovery
	Hg, Cr^{6+}, CN^-	80% - 120% Recovery	80% - 120% Recovery
	EC	90% - 110% Recovery	90% - 110% Recovery
	FOC, Chloride	70% - 130% Recovery	70% - 130% Recovery
	Methyl mercury	70% - 130% Recovery	70% - 130% Recovery
	Metals *(incl. B, HWS B, Ca, Mg, Na)*	80% - 120% Recovery [6]	80% - 120% Recovery [6]
Surrogate Recovery		*results outside:*	*results outside:*
	BNAs, PAHs	50% - 140% Recovery	50% - 140% Recovery
	1,4-Dioxane	50% - 140% Recovery	50% - 140% Recovery
	Dioxins/Furans	40% - 140% Recovery	40% - 140% Recovery
	OC Pesticides	50% - 140% Recovery	50% - 140% Recovery
	PCBs	60% - 140% Recovery	60% - 140% Recovery
	PHCs	60% - 140% Recovery	60% - 140% Recovery
	VOCs	50% - 140% Recovery	50% - 140% Recovery
Field Program QA Metric	**Alert Criteria**		
	Analytical Grouping	**Soil / Sediment**	**Air / Soil Vapour / Water / Groundwater**
Field Duplicate	pH	[3]	[3]
	BNAs, PAHs	> 40% RPD [1,4]	>30% RPD [1]
	1,4-Dioxane	> 50% RPD	> 30% RPD
	Dioxins/Furans	> 40% RPD	> 30% RPD
	OC Pesticides	> 40% RPD	> 30% RPD
	PCBs	> 40% RPD	> 30% RPD
	PHCs	> 30% RPD	> 30% RPD
	VOCs	> 50% RPD	> 30% RPD
	Hg, Cr^{6+}, CN^-	> 35% RPD	> 20% RPD
	EC	> 10% RPD	n/a
	FOC, Chloride	> 35% RPD	> 20% RPD
	Methyl mercury	> 30% RPD	> 20% RPD
	Metals *(incl. B, HWS B, Ca, Mg, Na)*	> 30% RPD [4,5]	> 20% RPD
Field Blank	ALL	Any concentration in excess of laboratory detection limits	

Table 3 Field Program Data Quality Objectives

Trip Blank	VOCs / F1 PHCs Volatile Gases	Any concentration in excess of laboratory detection limits
Equipment Blank	ALL	Any concentration in excess of laboratory detection limits
Trip Spike		*results outside:*
	F1 PHC	60% -140% Recovery
	Ketones and Gaseous Compounds at 20°C [7]	60% - 140% Recovery
	Other VOCs	70% - 130% Recovery

Source: adapted from Tables 5-1 through 5-14, Analytical Protocol (November 30, 2020)

Notes:

1. *Alert Criteria for p-chloroaniline, 3,3-dichlorobenzidene, phenol, 2,4-dimethylphenol, and 2,4-dinitrophenol is 30% - 130%*
2. *Alert Criteria for Hot Water Soluble Boron is 60% - 140% Recovery*
3. *RPD values are not calculated for pH analyses; however, results should be within 0.3 pH units*
4. *Increased RPD values may be encountered whenever duplicate analyses are completed on samples representing heterogeneous fill materials. Specific commentary regarding the validity of analytical results should be offered whenever the specified alert criteria is exceeded; however, significant concerns regarding the validity of analytical results would generally not be suspected if calculated RPD do not exceed the specified alert criteria more than a factor of 2.*
5. *Alert Criteria for Hot Water Soluble Boron is >40% RPD*
6. *Alert Criteria for Hot Water Soluble Boron is 70% - 130% Recovery*
7. *In a standard VOC list, this includes acetone, dichlorodifluoromethane, 1,4-dioxane, methyl ethyl ketone, methyl isobutyl ketone, 1,1,1,2-tetrachloroethane, and vinyl chloride*

APPENDIX V
BOREHOLE LOGS

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH201**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805168.2	EASTING (m): 601139.7 ELEV. (m) 108.94
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HYDROVAC / HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): -	SCREEN SLOT #: - SAND TYPE: - SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (200mm)	0										
		FILL sand and gravel FILL moist, redish brown silty clay trace sand, trace gravel	0.5 1	108.5 108			1			<5	M+I		
		moist, redish brown SILTY CLAY trace sand, trace gravel	1.5 2 2.5	107.5 107 106.5	50/180		2 3 4		100	<5 <5 <5			
		red WEATHERED SHALE	3 3.5 4 4.5 5 5.5 6	106 105.5 105 104.5 104 103.5 103	50/50 50/100 50/125 50/75 50/175		5 6 7 8 9		100	<5 <5 <5 <5 <5	BTEX, PHCs		
		END OF BOREHOLE											

TERRAPEX

LOGGED BY: JF	DRILLING DATE: 19-JAN-24
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REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH202**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805151.4	EASTING (m): 601140.8 ELEV. (m) 108.63
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HYDROVAC / HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): -	SCREEN SLOT #: - SAND TYPE: - SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (120mm)	0	108.5									
		moist, brown FILL sand and gravel	0.5	108			1			<5			
		moist, redish brown SILTY CLAY trace sand, gravel	1	107.5			2			<5	PAHs, M+I		
		--- trace shale fragments	1.5	107									
			2	106.5			3			<5			
			2.5	106	50/100		4		100	<5			
		red WEATHERED SHALE	3	105.5	50/125		5		100	<5			
			3.5	105									
			4	104.5									
		--- grey	4.5	104	50/125		6		100	<5	BTEX, PHCs		
			5	103.5									
					50/125		7		100	<5			
		END OF BOREHOLE											

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REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH203**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805092.5	EASTING (m): 601130.5 ELEV. (m) 108.56
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): -	SCREEN SLOT #: - SAND TYPE: - SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (100mm) moist, brown FILL sand and gravel	0 0.5 1 1.5	108.5 108 107.5 107	57 21		1 2		60 30	<5 <5			
		red WEATHERED SHALE	2 2.5	106.5 106	50 50/5"		3 4		40 100	<5 <5			
		--- grey	3 3.5	105.5 105	50/5"		5		90	<5			
			4 4.5	104.5 104	50/25		6						
		--- red --- wet	5 5.5 6 6.5	103.5 103 102.5 102	53/230		7		30	<5	BTEX, PHCs		
					50/75		8						
		END OF BOREHOLE											

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REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH204**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805087.6	EASTING (m): 601158.6
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HAND AUGER	
BOREHOLE DIAMETER (cm): 5	WELL DIAMETER (cm): -	SCREEN SLOT #: -
SAMPLE TYPE: AUGER / DRIVEN / CORING / DYNAMIC CONE / SHELBY / SPLIT SPOON		

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● 40 80 120 160 / N-VALUE (Blows/300mm) ▲ 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		TOPSOIL	0	108									
		moist, redish brown SILTY CLAY trace sand, gravel	0.5	107.5			1				PCBs		
		END OF BOREHOLE											

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REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW205**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805130.4	EASTING (m): 601156.7 ELEV. (m) 108.66
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 SAND TYPE: #2 SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (100mm)	0	108.5	31		1		40	<5			
		moist, brown FILL sand and gravel	0.5	108									
			1	107.5	10		2		30	<5	PAHs, M+I		
		SILTY CLAY trace sand, gravel	1.5	107	12		3		40	<5			
			2	106.5									
		moist to wet, red WEATHERED SHALE	2.5	106	50/3"		4		100	<5			
		--- grey	3	105.5	50/4"		5		100	<5	BTEX, PHCs		
			3.5	105									
			4	104.5									
		--- red	4.5	104	50/4"		6		100	20			
			5	103.5									
			5.5	103									
			6	102.5	53/9"		7		50	45	BTEX, PHCs		
			6.5	102									
					50/3"		8		100	20			
		END OF BOREHOLE											

TERRAPEX

LOGGED BY: JF	DRILLING DATE: 17-JAN-24
INPUT BY: JS	MONITORING DATE: 8-FEB-24
REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW206**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805116.1	EASTING (m): 601171.2 ELEV. (m) 108.41
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 SAND TYPE: #2 SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (120mm)	0	108	33		1		40	<5			
		grey FILL sand and gravel	0.5										
		redish-brown SILTY CLAY trace sand, gravel	1	107.5	13		2		60	<5			
			1.5	107									
			2	106.5	28		3		50	<5			
		red WEATHERED SHALE	2.5	106	50/5"		4		80	<5			
			3	105.5	50/4"		5		80	<5			
			3.5	105									
			4	104.5									
			4.5	104									
			5	103.5	80/8"		6		80	<5	BTEX, PHCs		
			5.5	103	79/11"		7		70	<5			
			6	102.5									
		END OF BOREHOLE											

TERRAPEX

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INPUT BY: JS	MONITORING DATE: 8-FEB-24
REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH207**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805127.0	EASTING (m): 601131.8 ELEV. (m) 108.69
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): -	SCREEN SLOT #: - SAND TYPE: - SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT	0	108.5									
		grey FILL sand and gravel	0.5	108	12		1		30	<5			
		moist, redish-brown SILTY CLAY trace sand, gravel	1	107.5	9		2		60	<5			
			1.5	107	14		3		80	<5			
		red WEATHERED SHALE	2	106.5									
			2.5	106	80/11"		4		60	<5			
		--- limestone seam	3	105.5	50/2"		5		90	<5	BTEX, PHCs		
			3.5	105									
			4	104.5									
			4.5	104	50/1"		6		10	<5			
			5	103.5									
			5.5	103									
			6										
		END OF BOREHOLE											

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INPUT BY: JS	MONITORING DATE: -
REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW208**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805130.8	EASTING (m): 601190.3
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10
SAMPLE TYPE: AUGER, DRIVEN, CORING, DYNAMIC CONE, SHELBY, SPLIT SPOON		

ELEV. (m) 108.49 | SAND TYPE: #2 | SEALANT TYPE: BENTONITE

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		TOPSOIL brown FILL silty clay trace organics, sand, gravel	0	108	28		1		30	<5			
		redish-brown SILTY CLAY trace sand, gravel	0.5 1	107.5	8		2		10	<5			
			1.5	107	10		3		30	<5	PAHs, M+I		
			2	106.5									
		grey WEATHERED SHALE	2.5	106	67/11"		4		60	<5			
			3	105.5	50/5"		5		100	<5			
		--- red	3.5	105									
			4	104.5	50/3"		6		70	<5			
			4.5	104									
			5	103.5									
			5.5	103	50/3"		7		80	<5	BTEX, PHCs		
			6	102.5									
		END OF BOREHOLE											

TERRAPEX

LOGGED BY: JF	DRILLING DATE: 18-JAN-24
INPUT BY: JS	MONITORING DATE: 8-FEB-24
REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW209**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805108.0	EASTING (m): 601116.5 ELEV. (m) 108.72
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 SAND TYPE: #2 SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (120mm) moist, brown FILL sand and gravel	0	108.5	60/1"		1		100	<5	PAHs, M+I		
		redish-brown SILTY CLAY trace sand, gravel, shale fragments	0.5 1 1.5	108 107.5	14		2		40	<5			
		red WEATHERED SHALE	2	107	80/10"		3		80	<5			
			2.5	106.5	50/3"		4		90	<5			
		grey	3	106									
			3.5	105.5	50/5"		5		70	<5	BTEX, PHCs		
		red	4	105	50/5"		6		50	<5			
			4.5	104.5									
			5	104	50/4"		7		60	<5			
			5.5	103.5	50/5"		8		50	<5			
			6	103									
			6.5	102.5	50/4"		9		90	<5			
			7	102									
			7.5	101.5									
			8	101	50/4"		10		100	<5			
			8.5	100.5									
			9	100									
				99.5	50/2"		11		80	<5			

TERRAPEX

LOGGED BY: JF	DRILLING DATE: 18-JAN-24
INPUT BY: JS	MONITORING DATE: 8-FEB-24
REVIEWED BY:	PAGE 1 OF 2

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW209**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805108.0	EASTING (m): 601116.5 / ELEV. (m) 108.72
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 / SAND TYPE: #2 / SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		END OF BOREHOLE											

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LOGGED BY: JF	DRILLING DATE: 18-JAN-24
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REVIEWED BY:	PAGE 2 OF 2

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: MW210**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805127.7	EASTING (m): 601110.8
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5	SCREEN SLOT #: 10
SAMPLE TYPE: AUGER, DRIVEN, CORING, DYNAMIC CONE, SHELBY, SPLIT SPOON		

ELEV. (m)	SAND TYPE	SEALANT TYPE
108.96	#2	BENTONITE

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (100mm)	0										
		brown FILL sand and gravel	0.5	108.5	47		1		60	<5			
		redish-brown SILTY CLAY trace sand, gravel	1	108	8		2		30	<5	PAHs, M+I		
			1.5	107.5									
			2	107	25		3		40	<5			
		red WEATHERED SHALE	2.5	106.5	50/3"		4		80	<5			
			3	106									
					50/5"		5		90	<5			
			3.5	105.5									
		--- grey	4	105	50/5"		6		70	<5	BTEX, PHCs		
		--- red	4.5	104.5	50/3"		7		70	<5			
			5	104									
					50/3"		8		40	<5			
			5.5	103.5									
			6	103	50/4"		9		50	<5			
		END OF BOREHOLE											

TERRAPEX	LOGGED BY: JF	DRILLING DATE: 18-JAN-24
	INPUT BY: JS	MONITORING DATE: 8-FEB-24
	REVIEWED BY:	PAGE 1 OF 1

CLIENT: Suncor Energy Products Partnership	PROJECT NO.: CT3959.00	**RECORD OF: BH211**
ADDRESS: 845 BURLOAK DRIVE	STATION:	
CITY/PROVINCE: OAKVILLE, ONTARIO	NORTHING (m): 4805110.4	EASTING (m): 601143.8 / ELEV. (m) 108.74
CONTRACTOR: GEO-ENVIRONMENTAL DRILLING INC.	METHOD: HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 15	WELL DIAMETER (cm): 5 / SCREEN SLOT #: - / SAND TYPE: -	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (100mm)	0	108.5	21		1		50	<5			
		moist, grey FILL sand and gravel	0.5										
		SILTY CLAY trace sand, gravel	1	108									
				107.5	22		2		40	<5			
			1.5										
			2	107	18		3		50	<5			
				106.5									
		red WEATHERED SHALE	2.5		17		4		30	<5			
				106									
		--- grey	3										
				105.5	50/5"		5		80	<5	BTEX, PHCs		
		--- red	3.5										
				105	50/5"		6		80	<5			
			4										
				104.5									
			4.5		50/3"		7		80	<5			
				104									
			5										
				103.5	50/2"		8		70	<5			
			5.5										
				103									
		--- grey	6										
				102.5	50/4"		9		70	<5			
		END OF BOREHOLE											

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APPENDIX VI
LABORATORY CERTIFICATES OF ANALYSIS

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
90 SCARSDALE RD
TORONTO, ON M3B2R7
(905) 474-5265
ATTENTION TO: Sara Sutherland
PROJECT: CT3959.00
AGAT WORK ORDER: 24T111689
SOIL ANALYSIS REVIEWED BY: Sukhwinder Randhawa, Inorganic Team Lead
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist
DATE REPORTED: Jan 29, 2024
PAGES (INCLUDING COVER): 52
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
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- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*
- *For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.*

AGAT Laboratories

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TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		BH201-1	BH202-3	MW205-2	MW208-3	MW210-2	MW209-1	MW9000-1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-01-15 12:00	2024-01-15 14:30	2024-01-17 12:00	2024-01-18 12:00	2024-01-18 14:00	2024-01-18 17:00	2024-01-18 18:00
Parameter	Unit	G / S	RDL	5598978	5598980	5598999	5599005	5599019	5599022	5599023
Antimony	µg/g		0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g		1	9	6	7	5	6	3	3
Barium	µg/g		2.0	47.6	179	129	170	108	23.5	24.3
Beryllium	µg/g		0.5	<0.5	0.9	1.1	1.3	0.7	<0.5	<0.5
Boron	µg/g		5	14	28	28	25	23	8	8
Boron (Hot Water Soluble)	µg/g		0.10	<0.10	0.17	0.20	0.23	0.42	0.12	0.14
Cadmium	µg/g		0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g		5	7	27	33	34	21	8	7
Cobalt	µg/g		0.8	4.7	14.4	16.7	14.8	10.2	3.1	2.9
Copper	µg/g		1.0	15.5	7.1	6.9	7.3	9.2	13.7	13.8
Lead	µg/g		1	30	11	11	12	11	21	23
Molybdenum	µg/g		0.5	0.9	1.1	1.2	1.1	0.7	<0.5	<0.5
Nickel	µg/g		1	10	32	38	33	22	7	7
Selenium	µg/g		0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g		0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g		0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g		0.50	0.59	0.74	1.06	1.32	0.58	0.56	<0.50
Vanadium	µg/g		2.0	10.5	32.5	38.5	43.1	29.3	13.3	12.4
Zinc	µg/g		5	181	70	73	75	62	99	74
Chromium, Hexavalent	µg/g		0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g		0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm		0.005	0.264	0.278	0.280	0.232	0.243	0.181	0.211
Sodium Adsorption Ratio (2:1) (Calc.)	N/A		N/A	1.66	0.606	0.718	0.490	0.626	0.883	1.17
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.28	7.27	7.28	7.27	7.49	7.87	7.95

Certified By:

AGAT Laboratories

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TEL (905)712-5100
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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5598978-5599023 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
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Certificate of Analysis

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:854 Burloak Drive Oakville Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	TCLP
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026	
Antimony	µg/g		0.8	<0.8	
Arsenic	µg/g		1	5	
Barium	µg/g		2.0	304	
Beryllium	µg/g		0.5	0.8	
Boron	µg/g		5	23	
Cadmium	µg/g		0.5	<0.5	
Chromium	µg/g		5	25	
Cobalt	µg/g		0.8	12.5	
Copper	µg/g		1.0	5.9	
Lead	µg/g		1	10	
Molybdenum	µg/g		0.5	1.0	
Nickel	µg/g		1	28	
Selenium	µg/g		0.8	<0.8	
Silver	µg/g		0.5	<0.5	
Thallium	µg/g		0.5	<0.5	
Uranium	µg/g		0.50	0.90	
Vanadium	µg/g		2.0	30.6	
Zinc	µg/g		5	58	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:854 Burloak Drive Oakville Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:AAC, JF, SKB

O. Reg. 558 - Metals Full Scan

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	TCLP
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026	
Antimony Leachate	mg/L		0.010	<0.010	
Arsenic Leachate	mg/L		0.010	<0.010	
Barium Leachate	mg/L		0.020	0.808	
Beryllium Leachate	mg/L		0.010	<0.010	
Boron Leachate	mg/L		0.050	<0.050	
Cadmium Leachate	mg/L		0.01	<0.01	
Chromium Leachate	mg/L		0.050	<0.050	
Cobalt Leachate	mg/L		0.001	0.005	
Copper Leachate	mg/L		0.080	<0.080	
Lead Leachate	mg/L		0.010	<0.010	
Molybdenum Leachate	mg/L		0.002	<0.002	
Nickel Leachate	mg/L		0.010	0.023	
Selenium Leachate	mg/L		0.020	<0.020	
Silver Leachate	mg/L		0.010	<0.010	
Thallium Leachate	mg/L		0.010	<0.010	
Uranium Leachate	mg/L		0.050	<0.050	
Vanadium Leachate	mg/L		0.020	<0.020	
Zinc Leachate	mg/L		0.050	<0.050	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

Particle Size by Sieve (Wet)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	MW208-4	MW208-2	MW202-7
				SAMPLE TYPE:	Soil	Soil	Soil
				DATE SAMPLED:	2024-01-18 11:30	2024-01-18 12:30	2024-01-15 13:00
Parameter	Unit	G / S	RDL		5599057	5599058	5599059
Sieve Analysis - 75 µm (retained)	%		NA		4.14	6.00	46.80
Sieve Analysis - 75 µm (passing)	%		NA		95.86	94.00	53.20
Soil Texture (Toronto)					Fine	Fine	Fine

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5599057-5599059 Value reported is the amount of sample passing through or retained on sieve after wash with water and represents proportion by weight particles smaller or larger than indicated sieve size.

Analysis performed at AGAT Toronto (unless marked by *)

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - BNA (full) + PAHs (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		TCLP
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026
Naphthalene	µg/g		0.05	<0.05
Acenaphthylene	µg/g		0.05	<0.05
Acenaphthene	µg/g		0.05	<0.05
Fluorene	µg/g		0.05	<0.05
Phenanthrene	µg/g		0.05	<0.05
Anthracene	µg/g		0.05	<0.05
Fluoranthene	µg/g		0.05	<0.05
Pyrene	µg/g		0.05	<0.05
Benz(a)anthracene	µg/g		0.05	<0.05
Chrysene	µg/g		0.05	<0.05
Benzo(b)fluoranthene	µg/g		0.05	<0.05
Benzo(k)fluoranthene	µg/g		0.05	<0.05
Benzo(a)pyrene	µg/g		0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g		0.05	<0.05
Dibenzo(a,h)anthracene	µg/g		0.05	<0.05
Benzo(g,h,i)perylene	µg/g		0.05	<0.05
Phenol	µg/g		0.5	<0.5
Bis(2-chloroethyl)ether	µg/g		0.1	<0.1
2-Chlorophenol	µg/g		0.1	<0.1
o-Cresol	µg/g		0.1	<0.1
Bis(2-chloroisopropyl)ether	µg/g		0.1	<0.1
m & p - Cresol	µg/g		0.1	<0.1
2,4-Dimethylphenol	µg/g		0.2	<0.2
2,4-Dichlorophenol	µg/g		0.1	<0.1
1,2,4-Trichlorobenzene	µg/g		0.05	<0.05
p-Chloroaniline	µg/g		0.5	<0.5
2-and 1-methyl Naphthalene	µg/g		0.05	<0.05
2,4,6-Trichlorophenol	µg/g		0.1	<0.1
2,4,5-Trichlorophenol	µg/g		0.1	<0.1

Certified By: NPopnikolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:854 Burloak Drive Oakville Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - BNA (full) + PAHs (Soil)

DATE RECEIVED: 2024-01-23 DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		TCLP
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026
1,1-Biphenyl	µg/g		0.05	<0.05
Dimethyl Phthalate	µg/g		0.1	<0.1
2,4 and 2,6-Dinitrotoluene	µg/g		0.5	<0.5
Diethyl Phthalate	µg/g		0.1	<0.1
Pentachlorophenol	µg/g		0.1	<0.1
3,3'-Dichlorobenzidine	µg/g		0.5	<0.5
2,4-Dinitrophenol	µg/g		2.0	<2.0
Bis(2-Ethylhexyl)phthalate	µg/g		0.2	<0.2
Moisture Content	%		0.1	10.6
wet weight BNA	g		0.01	10.88
Surrogate	Unit	Acceptable Limits		
phenol-d6 surrogate	%	50-140		78
2-Fluorophenol	%	50-140		80
2,4,6-Tribromophenol	%	50-140		99
Chrysene-d12	%	50-140		82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5599026 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopnikolof

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PAHs (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	BH202-3	MW205-2	MW208-3	MW210-2	MW209-1	MW9000-1
				SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2024-01-15 14:30	2024-01-17 12:00	2024-01-18 12:00	2024-01-18 14:00	2024-01-18 17:00	2024-01-18 18:00
Parameter	Unit	G / S	RDL		5598980	5598999	5599005	5599019	5599022	5599023
Naphthalene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1		15.0	3.8	11.0	15.3	5.0	4.2
Surrogate	Unit	Acceptable Limits								
Naphthalene-d8	%	50-140			75	70	85	70	70	95
Acridine-d9	%	50-140			85	70	70	70	80	100
Terphenyl-d14	%	50-140			70	70	95	80	75	85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5598980-5599023 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PCBs (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		BH204-1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-01-16 14:00
Parameter	Unit	G / S	RDL	5598998
Polychlorinated Biphenyls	µg/g		0.1	<0.1
Moisture Content	%		0.1	13.7
Surrogate	Unit	Acceptable Limits		
Decachlorobiphenyl	%	50-140		72

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5598998 Results are based on the dry weight of soil extracted.
PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popnikolof

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

SAMPLE DESCRIPTION:				BH201-7	BH202-6	BH203-6	MW205-5	MW205-7	MW1000-6	BH207-5	MW206-6
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2024-01-15 13:30	2024-01-16 12:00	2024-01-16 13:00	2024-01-17 13:00	2024-01-17 14:00	2024-01-17 15:00	2024-01-18 10:00	2024-01-18 11:00
Parameter	Unit	G / S	RDL	5598979	5598982	5598995	5599000	5599001	5599002	5599003	5599004
Benzene	µg/g		0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
F1 (C6 to C10)	µg/g		5	<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g		5	<5	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g		10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g		50	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g		50	<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g		50	NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%		0.1	5.7	11.9	14.7	19.1	16.6	12.2	5.0	9.2
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	60-140		82	102	92	90	106	98	93	79
Terphenyl	%	60-140		90	77	99	87	98	94	96	92

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	MW208-7	MW210-6	BH211-5	MW209-5
				SAMPLE TYPE:	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2024-01-18 13:00	2024-01-18 15:00	2024-01-18 16:00	2024-01-18 07:00
Parameter	Unit	G / S	RDL		5599018	5599020	5599021	5599024
Benzene	µg/g		0.02		<0.02	<0.02	<0.02	<0.02
Toluene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05
Ethylbenzene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g		0.05		<0.05	<0.05	<0.05	<0.05
F1 (C6 to C10)	µg/g		5		<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g		5		<5	<5	<5	<5
F2 (C10 to C16)	µg/g		10		<10	<10	<10	<10
F3 (C16 to C34)	µg/g		50		<50	<50	<50	<50
F4 (C34 to C50)	µg/g		50		<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g		50		NA	NA	NA	NA
Moisture Content	%		0.1		4.7	5.9	7.3	5.3
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	60-140			81	90	122	109
Terphenyl	%	60-140			88	98	81	92

Certified By:

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AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5598979-5599024 Results are based on sample dry weight.
The C6-C10 fraction is calculated using Toluene response factor.
Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Quality Control Data is available upon request.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopnikolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:854 Burloak Drive Oakville Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

DATE RECEIVED: 2024-01-23 DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		TCLP
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026
F1 (C6 to C10)	µg/g		5	<5
F1 (C6 to C10) minus BTEX	µg/g		5	<5
F2 (C10 to C16)	µg/g		10	<10
F2 (C10 to C16) minus Naphthalene	µg/g		10	<10
F3 (C16 to C34)	µg/g		50	<50
F3 (C16 to C34) minus PAHs	µg/g		50	<50
F4 (C34 to C50)	µg/g		50	<50
Gravimetric Heavy Hydrocarbons	µg/g		50	NA
Moisture Content	%		0.1	10.6
Surrogate	Unit	Acceptable Limits		
Toluene-d8	%	50-140		98
Terphenyl	%	60-140		88

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5599026 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopnikoff

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Certificate of Analysis

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - VOCs (with PHC) (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

		SAMPLE DESCRIPTION:		TCLP
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-01-22 15:00
Parameter	Unit	G / S	RDL	5599026
Dichlorodifluoromethane	µg/g		0.05	<0.05
Vinyl Chloride	ug/g		0.02	<0.02
Bromomethane	ug/g		0.05	<0.05
Trichlorofluoromethane	ug/g		0.05	<0.05
Acetone	ug/g		0.50	<0.50
1,1-Dichloroethylene	ug/g		0.05	<0.05
Methylene Chloride	ug/g		0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g		0.05	<0.05
Methyl tert-butyl Ether	ug/g		0.05	<0.05
1,1-Dichloroethane	ug/g		0.02	<0.02
Methyl Ethyl Ketone	ug/g		0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g		0.02	<0.02
Chloroform	ug/g		0.04	<0.04
1,2-Dichloroethane	ug/g		0.03	<0.03
1,1,1-Trichloroethane	ug/g		0.05	<0.05
Carbon Tetrachloride	ug/g		0.05	<0.05
Benzene	ug/g		0.02	<0.02
1,2-Dichloropropane	ug/g		0.03	<0.03
Trichloroethylene	ug/g		0.03	<0.03
Bromodichloromethane	ug/g		0.05	<0.05
Methyl Isobutyl Ketone	ug/g		0.50	<0.50
1,1,2-Trichloroethane	ug/g		0.04	<0.04
Toluene	ug/g		0.05	<0.05
Dibromochloromethane	ug/g		0.05	<0.05
Ethylene Dibromide	ug/g		0.04	<0.04
Tetrachloroethylene	ug/g		0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g		0.04	<0.04
Chlorobenzene	ug/g		0.05	<0.05
Ethylbenzene	ug/g		0.05	<0.05

Certified By: NPopnikoff

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PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:854 Burloak Drive Oakville Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:AAC, JF, SKB

O. Reg. 153(511) - VOCs (with PHC) (Soil)

DATE RECEIVED: 2024-01-23

DATE REPORTED: 2024-01-29

				SAMPLE DESCRIPTION:	TCLP
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2024-01-22 15:00
Parameter	Unit	G / S	RDL		5599026
m & p-Xylene	ug/g		0.05		<0.05
Bromoform	ug/g		0.05		<0.05
Styrene	ug/g		0.05		<0.05
1,1,2,2-Tetrachloroethane	ug/g		0.05		<0.05
o-Xylene	ug/g		0.05		<0.05
1,3-Dichlorobenzene	ug/g		0.05		<0.05
1,4-Dichlorobenzene	ug/g		0.05		<0.05
1,2-Dichlorobenzene	ug/g		0.05		<0.05
Xylenes (Total)	ug/g		0.05		<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g		0.05		<0.05
n-Hexane	µg/g		0.05		<0.05
Moisture Content	%		0.1		10.6
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			98
4-Bromofluorobenzene	% Recovery	50-140			78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5599026 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00
ATTENTION TO: Sara Sutherland
SAMPLING SITE:854 Burloak Drive Oakville Ontario
SAMPLED BY:AAC, JF, SKB

Soil Analysis

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	5598897		<0.8	<0.8	NA	< 0.8	124%	70%	130%	100%	80%	120%	77%	70%	130%
Arsenic	5598897		4	4	NA	< 1	118%	70%	130%	98%	80%	120%	99%	70%	130%
Barium	5598897		60.6	60.9	0.5%	< 2.0	99%	70%	130%	90%	80%	120%	89%	70%	130%
Beryllium	5598897		<0.5	<0.5	NA	< 0.5	108%	70%	130%	113%	80%	120%	114%	70%	130%
Boron	5598897		<5	<5	NA	< 5	85%	70%	130%	112%	80%	120%	98%	70%	130%
Boron (Hot Water Soluble)	5599623		0.54	0.55	1.8%	< 0.10	104%	60%	140%	104%	70%	130%	98%	60%	140%
Cadmium	5598897		<0.5	<0.5	NA	< 0.5	108%	70%	130%	98%	80%	120%	100%	70%	130%
Chromium	5598897		15	14	NA	< 5	98%	70%	130%	98%	80%	120%	89%	70%	130%
Cobalt	5598897		6.3	5.9	6.6%	< 0.8	105%	70%	130%	91%	80%	120%	92%	70%	130%
Copper	5598897		22.0	20.9	5.1%	< 1.0	90%	70%	130%	96%	80%	120%	90%	70%	130%
Lead	5598897		4	4	NA	< 1	107%	70%	130%	89%	80%	120%	89%	70%	130%
Molybdenum	5598897		<0.5	<0.5	NA	< 0.5	111%	70%	130%	107%	80%	120%	112%	70%	130%
Nickel	5598897		14	13	7.4%	< 1	101%	70%	130%	92%	80%	120%	93%	70%	130%
Selenium	5598897		<0.8	<0.8	NA	< 0.8	128%	70%	130%	102%	80%	120%	103%	70%	130%
Silver	5598897		<0.5	<0.5	NA	< 0.5	104%	70%	130%	96%	80%	120%	94%	70%	130%
Thallium	5598897		<0.5	<0.5	NA	< 0.5	104%	70%	130%	93%	80%	120%	91%	70%	130%
Uranium	5598897		<0.50	0.54	NA	< 0.50	114%	70%	130%	107%	80%	120%	110%	70%	130%
Vanadium	5598897		22.7	22.1	2.7%	< 2.0	106%	70%	130%	91%	80%	120%	88%	70%	130%
Zinc	5598897		36	36	0.0%	< 5	100%	70%	130%	96%	80%	120%	97%	70%	130%
Chromium, Hexavalent	5599023	5599023	<0.2	<0.2	NA	< 0.2	102%	70%	130%	98%	80%	120%	71%	70%	130%
Cyanide, WAD	5596215		<0.040	<0.040	NA	< 0.040	89%	70%	130%	103%	80%	120%	107%	70%	130%
Mercury	5598897		<0.10	<0.10	NA	< 0.10	121%	70%	130%	104%	80%	120%	104%	70%	130%
Electrical Conductivity (2:1)	5598376		0.570	0.529	7.5%	< 0.005	108%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	5599623		2.92	2.90	0.7%	NA									
pH, 2:1 CaCl2 Extraction	5599644		6.83	7.12	4.2%	NA	101%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	5598897		<0.8	<0.8	NA	< 0.8	124%	70%	130%	100%	80%	120%	77%	70%	130%
Arsenic	5598897		4	4	NA	< 1	118%	70%	130%	98%	80%	120%	99%	70%	130%
Barium	5598897		60.6	60.9	0.5%	< 2.0	99%	70%	130%	90%	80%	120%	89%	70%	130%
Beryllium	5598897		<0.5	<0.5	NA	< 0.5	108%	70%	130%	113%	80%	120%	114%	70%	130%
Boron	5598897		<5	<5	NA	< 5	85%	70%	130%	112%	80%	120%	98%	70%	130%
Cadmium	5598897		<0.5	<0.5	NA	< 0.5	108%	70%	130%	98%	80%	120%	100%	70%	130%
Chromium	5598897		15	14	NA	< 5	98%	70%	130%	98%	80%	120%	89%	70%	130%
Cobalt	5598897		6.3	5.9	6.6%	< 0.8	105%	70%	130%	91%	80%	120%	92%	70%	130%
Copper	5598897		22.0	20.9	5.1%	< 1.0	90%	70%	130%	96%	80%	120%	90%	70%	130%

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00
ATTENTION TO: Sara Sutherland
SAMPLING SITE:854 Burloak Drive Oakville Ontario
SAMPLED BY:AAC, JF, SKB

Soil Analysis (Continued)

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Lead	5598897		4	4	NA	< 1	107%	70%	130%	89%	80%	120%	89%	70%	130%
Molybdenum	5598897		<0.5	<0.5	NA	< 0.5	111%	70%	130%	107%	80%	120%	112%	70%	130%
Nickel	5598897		14	13	7.4%	< 1	101%	70%	130%	92%	80%	120%	93%	70%	130%
Selenium	5598897		<0.8	<0.8	NA	< 0.8	128%	70%	130%	102%	80%	120%	103%	70%	130%
Silver	5598897		<0.5	<0.5	NA	< 0.5	104%	70%	130%	96%	80%	120%	94%	70%	130%
Thallium	5598897		<0.5	<0.5	NA	< 0.5	104%	70%	130%	93%	80%	120%	91%	70%	130%
Uranium	5598897		<0.50	0.54	NA	< 0.50	114%	70%	130%	107%	80%	120%	110%	70%	130%
Vanadium	5598897		22.7	22.1	2.7%	< 2.0	106%	70%	130%	91%	80%	120%	88%	70%	130%
Zinc	5598897		36	36	0.0%	< 5	100%	70%	130%	96%	80%	120%	97%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Particle Size by Sieve (Wet)															
Sieve Analysis - 75 µm (retained)	5599057	5599057	4.14	4.30	3.8%	NA	100%	75%	125%						
Sieve Analysis - 75 µm (passing)	5599057	5599057	95.86	95.70	0.2%	NA									

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 558 - Metals Full Scan															
Antimony Leachate	5593512		<0.010	<0.010	NA	< 0.010	106%	70%	130%	100%	80%	120%	98%	70%	130%
Arsenic Leachate	5593512		<0.010	<0.010	NA	< 0.010	105%	70%	130%	100%	80%	120%	105%	70%	130%
Barium Leachate	5593512		0.523	0.516	1.4%	< 0.020	100%	70%	130%	99%	80%	120%	82%	70%	130%
Beryllium Leachate	5593512		<0.010	<0.010	NA	< 0.010	98%	70%	130%	106%	80%	120%	104%	70%	130%
Boron Leachate	5593512		<0.050	<0.050	NA	< 0.050	100%	70%	130%	108%	80%	120%	89%	70%	130%
Cadmium Leachate	5593512		<0.01	<0.01	NA	< 0.01	101%	70%	130%	100%	80%	120%	98%	70%	130%
Chromium Leachate	5593512		<0.050	<0.050	NA	< 0.050	100%	70%	130%	101%	80%	120%	96%	70%	130%
Cobalt Leachate	5593512		0.047	0.046	2.4%	< 0.001	94%	70%	130%	92%	80%	120%	93%	70%	130%
Copper Leachate	5593512		<0.080	<0.080	NA	< 0.080	97%	70%	130%	95%	80%	120%	93%	70%	130%
Lead Leachate	5593512		0.025	0.026	NA	< 0.010	91%	70%	130%	88%	80%	120%	82%	70%	130%
Molybdenum Leachate	5593512		<0.002	<0.002	NA	< 0.002	101%	70%	130%	106%	80%	120%	111%	70%	130%
Nickel Leachate	5593512		0.033	0.028	NA	< 0.010	94%	70%	130%	87%	80%	120%	84%	70%	130%
Selenium Leachate	5593512		<0.020	<0.020	NA	< 0.020	97%	70%	130%	100%	80%	120%	115%	70%	130%
Silver Leachate	5593512		<0.010	<0.010	NA	< 0.010	102%	70%	130%	95%	80%	120%	94%	70%	130%
Thallium Leachate	5593512		<0.010	<0.010	NA	< 0.010	95%	70%	130%	85%	80%	120%	90%	70%	130%
Uranium Leachate	5593512		<0.050	<0.050	NA	< 0.050	94%	70%	130%	104%	80%	120%	95%	70%	130%
Vanadium Leachate	5593512		<0.020	<0.020	NA	< 0.020	96%	70%	130%	93%	80%	120%	95%	70%	130%
Zinc Leachate	5593512		1.04	1.06	2.6%	< 0.050	101%	70%	130%	100%	80%	120%	94%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

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Quality Assurance

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PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

Soil Analysis (Continued)

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By:

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Trace Organics Analysis

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (Soil)															
Benzene	5599024	5599024	<0.02	<0.02	NA	< 0.02	93%	60%	140%	84%	60%	140%	85%	60%	140%
Toluene	5599024	5599024	<0.05	<0.05	NA	< 0.05	104%	60%	140%	88%	60%	140%	86%	60%	140%
Ethylbenzene	5599024	5599024	<0.05	<0.05	NA	< 0.05	104%	60%	140%	92%	60%	140%	77%	60%	140%
m & p-Xylene	5599024	5599024	<0.05	<0.05	NA	< 0.05	105%	60%	140%	102%	60%	140%	91%	60%	140%
o-Xylene	5599024	5599024	<0.05	<0.05	NA	< 0.05	78%	60%	140%	105%	60%	140%	106%	60%	140%
F1 (C6 to C10)	5599024	5599024	<5	<5	NA	< 5	105%	60%	140%	95%	60%	140%	97%	60%	140%
F2 (C10 to C16)	5598979	5598979	< 10	< 10	NA	< 10	109%	60%	140%	105%	60%	140%	96%	60%	140%
F3 (C16 to C34)	5598979	5598979	< 50	< 50	NA	< 50	106%	60%	140%	103%	60%	140%	113%	60%	140%
F4 (C34 to C50)	5598979	5598979	< 50	< 50	NA	< 50	85%	60%	140%	75%	60%	140%	65%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	5598980	5598980	<0.05	<0.05	NA	< 0.05	115%	50%	140%	83%	50%	140%	85%	50%	140%
Acenaphthylene	5598980	5598980	<0.05	<0.05	NA	< 0.05	97%	50%	140%	75%	50%	140%	75%	50%	140%
Acenaphthene	5598980	5598980	<0.05	<0.05	NA	< 0.05	106%	50%	140%	73%	50%	140%	83%	50%	140%
Fluorene	5598980	5598980	<0.05	<0.05	NA	< 0.05	99%	50%	140%	75%	50%	140%	85%	50%	140%
Phenanthrene	5598980	5598980	<0.05	<0.05	NA	< 0.05	109%	50%	140%	80%	50%	140%	88%	50%	140%
Anthracene	5598980	5598980	<0.05	<0.05	NA	< 0.05	114%	50%	140%	85%	50%	140%	98%	50%	140%
Fluoranthene	5598980	5598980	<0.05	<0.05	NA	< 0.05	108%	50%	140%	88%	50%	140%	93%	50%	140%
Pyrene	5598980	5598980	<0.05	<0.05	NA	< 0.05	104%	50%	140%	85%	50%	140%	93%	50%	140%
Benz(a)anthracene	5598980	5598980	<0.05	<0.05	NA	< 0.05	97%	50%	140%	73%	50%	140%	73%	50%	140%
Chrysene	5598980	5598980	<0.05	<0.05	NA	< 0.05	111%	50%	140%	78%	50%	140%	83%	50%	140%
Benzo(b)fluoranthene	5598980	5598980	<0.05	<0.05	NA	< 0.05	85%	50%	140%	93%	50%	140%	90%	50%	140%
Benzo(k)fluoranthene	5598980	5598980	<0.05	<0.05	NA	< 0.05	109%	50%	140%	103%	50%	140%	85%	50%	140%
Benzo(a)pyrene	5598980	5598980	<0.05	<0.05	NA	< 0.05	91%	50%	140%	73%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	5598980	5598980	<0.05	<0.05	NA	< 0.05	90%	50%	140%	90%	50%	140%	83%	50%	140%
Dibenz(a,h)anthracene	5598980	5598980	<0.05	<0.05	NA	< 0.05	83%	50%	140%	78%	50%	140%	73%	50%	140%
Benzo(g,h,i)perylene	5598980	5598980	<0.05	<0.05	NA	< 0.05	89%	50%	140%	90%	50%	140%	98%	50%	140%
O. Reg. 153(511) - PCBs (Soil)															
Polychlorinated Biphenyls	5604131		< 0.1	< 0.1	NA	< 0.1	102%	50%	140%	97%	50%	140%	107%	50%	140%
O. Reg. 153(511) - VOCs (with PHC) (Soil)															
Dichlorodifluoromethane	5598124		<0.05	<0.05	NA	< 0.05	92%	50%	140%	106%	50%	140%	89%	50%	140%
Vinyl Chloride	5598124		<0.02	<0.02	NA	< 0.02	104%	50%	140%	104%	50%	140%	115%	50%	140%
Bromomethane	5598124		<0.05	<0.05	NA	< 0.05	90%	50%	140%	115%	50%	140%	109%	50%	140%
Trichlorofluoromethane	5598124		<0.05	<0.05	NA	< 0.05	99%	50%	140%	86%	50%	140%	88%	50%	140%
Acetone	5598124		<0.50	<0.50	NA	< 0.50	95%	50%	140%	100%	50%	140%	106%	50%	140%
1,1-Dichloroethylene	5598124		< 0.05	< 0.05	NA	< 0.05	100%	50%	140%	112%	60%	130%	101%	50%	140%
Methylene Chloride	5598124		<0.05	<0.05	NA	< 0.05	84%	50%	140%	83%	60%	130%	73%	50%	140%
Trans- 1,2-Dichloroethylene	5598124		<0.05	<0.05	NA	< 0.05	98%	50%	140%	96%	60%	130%	103%	50%	140%
Methyl tert-butyl Ether	5598124		<0.05	<0.05	NA	< 0.05	76%	50%	140%	61%	60%	130%	65%	50%	140%

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00
ATTENTION TO: Sara Sutherland
SAMPLING SITE:854 Burloak Drive Oakville Ontario
SAMPLED BY:AAC, JF, SKB

Trace Organics Analysis (Continued)

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,1-Dichloroethane	5598124		<0.02	<0.02	NA	< 0.02	96%	50%	140%	92%	60%	130%	99%	50%	140%
Methyl Ethyl Ketone	5598124		<0.50	<0.50	NA	< 0.50	84%	50%	140%	96%	50%	140%	105%	50%	140%
Cis- 1,2-Dichloroethylene	5598124		<0.02	<0.02	NA	< 0.02	93%	50%	140%	100%	60%	130%	93%	50%	140%
Chloroform	5598124		<0.04	<0.04	NA	< 0.04	98%	50%	140%	94%	60%	130%	98%	50%	140%
1,2-Dichloroethane	5598124		<0.03	<0.03	NA	< 0.03	86%	50%	140%	100%	60%	130%	103%	50%	140%
1,1,1-Trichloroethane	5598124		<0.05	<0.05	NA	< 0.05	76%	50%	140%	71%	60%	130%	76%	50%	140%
Carbon Tetrachloride	5598124		<0.05	<0.05	NA	< 0.05	76%	50%	140%	69%	60%	130%	76%	50%	140%
Benzene	5598124		<0.02	<0.02	NA	< 0.02	94%	50%	140%	105%	60%	130%	101%	50%	140%
1,2-Dichloropropane	5598124		<0.03	<0.03	NA	< 0.03	83%	50%	140%	84%	60%	130%	88%	50%	140%
Trichloroethylene	5598124		<0.03	<0.03	NA	< 0.03	86%	50%	140%	84%	60%	130%	97%	50%	140%
Bromodichloromethane	5598124		<0.05	<0.05	NA	< 0.05	97%	50%	140%	61%	60%	130%	78%	50%	140%
Methyl Isobutyl Ketone	5598124		<0.50	<0.50	NA	< 0.50	96%	50%	140%	98%	50%	140%	106%	50%	140%
1,1,2-Trichloroethane	5598124		<0.04	<0.04	NA	< 0.04	99%	50%	140%	84%	60%	130%	102%	50%	140%
Toluene	5598124		<0.05	<0.05	NA	< 0.05	109%	50%	140%	104%	60%	130%	100%	50%	140%
Dibromochloromethane	5598124		<0.05	<0.05	NA	< 0.05	76%	50%	140%	63%	60%	130%	71%	50%	140%
Ethylene Dibromide	5598124		<0.04	<0.04	NA	< 0.04	92%	50%	140%	90%	60%	130%	98%	50%	140%
Tetrachloroethylene	5598124		< 0.05	< 0.05	NA	< 0.05	89%	50%	140%	95%	60%	130%	99%	50%	140%
1,1,1,2-Tetrachloroethane	5598124		<0.04	<0.04	NA	< 0.04	72%	50%	140%	81%	60%	130%	85%	50%	140%
Chlorobenzene	5598124		<0.05	<0.05	NA	< 0.05	83%	50%	140%	89%	60%	130%	90%	50%	140%
Ethylbenzene	5598124		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	60%	130%	93%	50%	140%
m & p-Xylene	5598124		<0.05	<0.05	NA	< 0.05	96%	50%	140%	102%	60%	130%	93%	50%	140%
Bromoform	5598124		<0.05	<0.05	NA	< 0.05	73%	50%	140%	95%	60%	130%	95%	50%	140%
Styrene	5598124		<0.05	<0.05	NA	< 0.05	79%	50%	140%	83%	60%	130%	87%	50%	140%
1,1,2,2-Tetrachloroethane	5598124		<0.05	<0.05	NA	< 0.05	98%	50%	140%	84%	60%	130%	87%	50%	140%
o-Xylene	5598124		<0.05	<0.05	NA	< 0.05	97%	50%	140%	103%	60%	130%	103%	50%	140%
1,3-Dichlorobenzene	5598124		<0.05	<0.05	NA	< 0.05	97%	50%	140%	95%	60%	130%	105%	50%	140%
1,4-Dichlorobenzene	5598124		<0.05	<0.05	NA	< 0.05	99%	50%	140%	101%	60%	130%	106%	50%	140%
1,2-Dichlorobenzene	5598124		<0.05	<0.05	NA	< 0.05	89%	50%	140%	94%	60%	130%	103%	50%	140%
n-Hexane	5598124		<0.05	<0.05	NA	< 0.05	87%	50%	140%	91%	60%	130%	70%	50%	140%
O. Reg. 153(511) - BNA (full) + PAHs (Soil)															
Naphthalene	5588423		< 0.05	< 0.05	NA	< 0.05	100%	50%	140%	71%	50%	140%	71%	50%	140%
Acenaphthylene	5588423		< 0.05	< 0.05	NA	< 0.05	86%	50%	140%	65%	50%	140%	67%	50%	140%
Acenaphthene	5588423		< 0.05	< 0.05	NA	< 0.05	89%	50%	140%	65%	50%	140%	67%	50%	140%
Fluorene	5588423		< 0.05	< 0.05	NA	< 0.05	91%	50%	140%	71%	50%	140%	73%	50%	140%
Phenanthrene	5588423		< 0.05	< 0.05	NA	< 0.05	92%	50%	140%	74%	50%	140%	73%	50%	140%
Anthracene	5588423		< 0.05	< 0.05	NA	< 0.05	88%	50%	140%	75%	50%	140%	75%	50%	140%
Fluoranthene	5588423		< 0.05	< 0.05	NA	< 0.05	95%	50%	140%	80%	50%	140%	76%	50%	140%
Pyrene	5588423		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	80%	50%	140%	75%	50%	140%
Benz(a)anthracene	5588423		< 0.05	< 0.05	NA	< 0.05	73%	50%	140%	63%	50%	140%	61%	50%	140%

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

Trace Organics Analysis (Continued)

RPT Date: Jan 29, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Chrysene	5588423		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	73%	50%	140%	69%	50%	140%
Benzo(b)fluoranthene	5588423		< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	93%	50%	140%	101%	50%	140%
Benzo(k)fluoranthene	5588423		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	84%	50%	140%	105%	50%	140%
Benzo(a)pyrene	5588423		< 0.05	< 0.05	NA	< 0.05	109%	50%	140%	70%	50%	140%	69%	50%	140%
Indeno(1,2,3-cd)pyrene	5588423		< 0.05	< 0.05	NA	< 0.05	83%	50%	140%	81%	50%	140%	74%	50%	140%
Dibenzo(a,h)anthracene	5588423		< 0.05	< 0.05	NA	< 0.05	74%	50%	140%	63%	50%	140%	94%	50%	140%
Benzo(g,h,i)perylene	5588423		< 0.05	< 0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	77%	50%	140%
Phenol	5588423		< 0.5	< 0.5	NA	< 0.5	100%	30%	130%	67%	30%	130%	52%	30%	130%
Bis(2-chloroethyl)ether	5588423		< 0.1	< 0.1	NA	< 0.1	97%	50%	140%	74%	50%	140%	58%	50%	140%
2-Chlorophenol	5588423		< 0.1	< 0.1	NA	< 0.1	118%	50%	140%	76%	50%	140%	72%	50%	140%
o-Cresol	5588423		< 0.1	< 0.1	NA	< 0.1	105%	50%	140%	61%	50%	140%	55%	50%	140%
Bis(2-chloroisopropyl)ether	5588423		< 0.1	< 0.1	NA	< 0.1	78%	50%	140%	81%	50%	140%	82%	50%	140%
m & p - Cresol	5588423		< 0.1	< 0.1	NA	< 0.1	68%	50%	140%	87%	50%	140%	84%	50%	140%
2,4-Dimethylphenol	5588423		< 0.2	< 0.2	NA	< 0.2	79%	30%	130%	75%	30%	130%	73%	30%	130%
2,4-Dichlorophenol	5588423		< 0.1	< 0.1	NA	< 0.1	110%	50%	140%	83%	50%	140%	81%	50%	140%
1,2,4-Trichlorobenzene	5588423		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	67%	50%	140%	68%	50%	140%
p-Chloroaniline	5588423		< 0.5	< 0.5	NA	< 0.5	69%	30%	130%	87%	30%	130%	78%	30%	130%
2,4,6-Trichlorophenol	5588423		< 0.1	< 0.1	NA	< 0.1	105%	50%	140%	77%	50%	140%	61%	50%	140%
2,4,5-Trichlorophenol	5588423		< 0.1	< 0.1	NA	< 0.1	111%	50%	140%	64%	50%	140%	62%	50%	140%
1,1-Biphenyl	5588423		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	72%	50%	140%	74%	50%	140%
Dimethyl Phthalate	5588423		< 0.1	< 0.1	NA	< 0.1	105%	50%	140%	74%	50%	140%	72%	50%	140%
Diethyl Phthalate	5588423		< 0.1	< 0.1	NA	< 0.1	99%	50%	140%	81%	50%	140%	79%	50%	140%
Pentachlorophenol	5588423		< 0.1	< 0.1	NA	< 0.1	86%	50%	140%	63%	50%	140%	98%	50%	140%
3,3'-Dichlorobenzidine	5588423		< 0.5	< 0.5	NA	< 0.5	66%	30%	130%	67%	30%	130%	88%	30%	130%
2,4-Dinitrophenol	5588423		< 2.0	< 2.0	NA	< 2.0	78%	30%	130%	95%	30%	130%	66%	30%	130%
Bis(2-Ethylhexyl)phthalate	5588423		< 0.2	< 0.2	NA	< 0.2	97%	50%	140%	85%	50%	140%	79%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By:

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598978	BH201-1	Soil	15-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598979	BH201-7	Soil	15-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598979	BH201-7	Soil	15-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598980	BH202-3	Soil	15-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598980	BH202-3	Soil	15-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598982	BH202-6	Soil	16-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598982	BH202-6	Soil	16-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598995	BH203-6	Soil	16-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598998	BH204-1	Soil	16-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PCBs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Polychlorinated Biphenyls	26-JAN-2024	29-JAN-2024	VDP
Decachlorobiphenyl	26-JAN-2024	29-JAN-2024	VDP
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598999	MW205-2	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598999	MW205-2	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5598999	MW205-2	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599000	MW205-5	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599001	MW205-7	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599001	MW205-7	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599002	MW1000-6	Soil	17-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	24-JAN-2024	24-JAN-2024	VB
Toluene	24-JAN-2024	24-JAN-2024	VB
Ethylbenzene	24-JAN-2024	24-JAN-2024	VB
m & p-Xylene	24-JAN-2024	24-JAN-2024	VB
o-Xylene	24-JAN-2024	24-JAN-2024	VB
Xylenes (Total)	24-JAN-2024	24-JAN-2024	SYS
F1 (C6 to C10)	24-JAN-2024	24-JAN-2024	VB
F1 (C6 to C10) minus BTEX	24-JAN-2024	24-JAN-2024	SYS
Toluene-d8	24-JAN-2024	24-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599003	BH207-5	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599003	BH207-5	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599004	MW206-6	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599005	MW208-3	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE

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AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599005	MW208-3	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599005	MW208-3	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599018	MW208-7	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599019	MW210-2	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE

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AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599019	MW210-2	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599019	MW210-2	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599020	MW210-6	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599021	BH211-5	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599021	BH211-5	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599022	MW209-1	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599022	MW209-1	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599023	MW9000-1	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Boron (Hot Water Soluble)	25-JAN-2024	25-JAN-2024	ZK
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599023	MW9000-1	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE
Chromium, Hexavalent	29-JAN-2024	29-JAN-2024	RC
Cyanide, WAD	25-JAN-2024	25-JAN-2024	NP
Mercury	25-JAN-2024	25-JAN-2024	SE
Electrical Conductivity (2:1)	25-JAN-2024	25-JAN-2024	XL
Sodium Adsorption Ratio (2:1) (Calc.)	25-JAN-2024	25-JAN-2024	XH
pH, 2:1 CaCl2 Extraction	26-JAN-2024	26-JAN-2024	XL

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	27-JAN-2024	27-JAN-2024	CA
Acenaphthylene	27-JAN-2024	27-JAN-2024	CA
Acenaphthene	27-JAN-2024	27-JAN-2024	CA
Fluorene	27-JAN-2024	27-JAN-2024	CA
Phenanthrene	27-JAN-2024	27-JAN-2024	CA
Anthracene	27-JAN-2024	27-JAN-2024	CA
Fluoranthene	27-JAN-2024	27-JAN-2024	CA
Pyrene	27-JAN-2024	27-JAN-2024	CA
Benz(a)anthracene	27-JAN-2024	27-JAN-2024	CA
Chrysene	27-JAN-2024	27-JAN-2024	CA
Benzo(b)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(k)fluoranthene	27-JAN-2024	27-JAN-2024	CA
Benzo(a)pyrene	27-JAN-2024	27-JAN-2024	CA
Indeno(1,2,3-cd)pyrene	27-JAN-2024	27-JAN-2024	CA
Dibenz(a,h)anthracene	27-JAN-2024	27-JAN-2024	CA
Benzo(g,h,i)perylene	27-JAN-2024	27-JAN-2024	CA
2-and 1-methyl Naphthalene	27-JAN-2024	27-JAN-2024	SYS
Naphthalene-d8	27-JAN-2024	27-JAN-2024	CA
Acridine-d9	27-JAN-2024	27-JAN-2024	CA
Terphenyl-d14	27-JAN-2024	27-JAN-2024	CA
Moisture Content	26-JAN-2024	26-JAN-2024	AK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599024	MW209-5	Soil	18-JAN-2024	23-JAN-2024

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Time Markers

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599024	MW209-5	Soil	18-JAN-2024	23-JAN-2024

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	VB
Toluene	25-JAN-2024	25-JAN-2024	VB
Ethylbenzene	25-JAN-2024	25-JAN-2024	VB
m & p-Xylene	25-JAN-2024	25-JAN-2024	VB
o-Xylene	25-JAN-2024	25-JAN-2024	VB
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	VB
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	VB
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599026	TCLP	Soil	22-JAN-2024	23-JAN-2024

O. Reg. 153(511) - BNA (full) + PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	29-JAN-2024	29-JAN-2024	PP
Acenaphthylene	29-JAN-2024	29-JAN-2024	PP
Acenaphthene	29-JAN-2024	29-JAN-2024	PP
Fluorene	29-JAN-2024	29-JAN-2024	PP
Phenanthrene	29-JAN-2024	29-JAN-2024	PP
Anthracene	29-JAN-2024	29-JAN-2024	PP
Fluoranthene	29-JAN-2024	29-JAN-2024	PP
Pyrene	29-JAN-2024	29-JAN-2024	PP
Benz(a)anthracene	29-JAN-2024	29-JAN-2024	PP
Chrysene	29-JAN-2024	29-JAN-2024	PP
Benzo(b)fluoranthene	29-JAN-2024	29-JAN-2024	PP
Benzo(k)fluoranthene	29-JAN-2024	29-JAN-2024	PP
Benzo(a)pyrene	29-JAN-2024	29-JAN-2024	PP
Indeno(1,2,3-cd)pyrene	29-JAN-2024	29-JAN-2024	PP
Dibenzo(a,h)anthracene	29-JAN-2024	29-JAN-2024	PP
Benzo(g,h,i)perylene	29-JAN-2024	29-JAN-2024	PP
Phenol	29-JAN-2024	29-JAN-2024	PP
Bis(2-chloroethyl)ether	29-JAN-2024	29-JAN-2024	PP
2-Chlorophenol	29-JAN-2024	29-JAN-2024	PP

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599026	TCLP	Soil	22-JAN-2024	23-JAN-2024

O. Reg. 153(511) - BNA (full) + PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
o-Cresol	29-JAN-2024	29-JAN-2024	PP
Bis(2-chloroisopropyl)ether	29-JAN-2024	29-JAN-2024	PP
m & p - Cresol	29-JAN-2024	29-JAN-2024	PP
2,4-Dimethylphenol	29-JAN-2024	29-JAN-2024	PP
2,4-Dichlorophenol	29-JAN-2024	29-JAN-2024	PP
1,2,4-Trichlorobenzene	29-JAN-2024	29-JAN-2024	PP
p-Chloroaniline	29-JAN-2024	29-JAN-2024	PP
2-and 1-methyl Naphthalene	29-JAN-2024	29-JAN-2024	SYS
2,4,6-Trichlorophenol	29-JAN-2024	29-JAN-2024	PP
2,4,5-Trichlorophenol	29-JAN-2024	29-JAN-2024	PP
1,1-Biphenyl	29-JAN-2024	29-JAN-2024	PP
Dimethyl Phthalate	29-JAN-2024	29-JAN-2024	PP
2,4 and 2,6-Dinitrotoluene	29-JAN-2024	29-JAN-2024	SYS
Diethyl Phthalate	29-JAN-2024	29-JAN-2024	PP
Pentachlorophenol	29-JAN-2024	29-JAN-2024	PP
3,3'-Dichlorobenzidine	29-JAN-2024	29-JAN-2024	PP
2,4-Dinitrophenol	29-JAN-2024	29-JAN-2024	PP
Bis(2-Ethylhexyl)phthalate	29-JAN-2024	29-JAN-2024	PP
phenol-d6 surrogate	29-JAN-2024	29-JAN-2024	PP
2-Fluorophenol	29-JAN-2024	29-JAN-2024	PP
2,4,6-Tribromophenol	29-JAN-2024	29-JAN-2024	PP
Chrysene-d12	29-JAN-2024	29-JAN-2024	PP
Moisture Content	26-JAN-2024	26-JAN-2024	AK
wet weight BNA	26-JAN-2024	26-JAN-2024	AK

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	25-JAN-2024	25-JAN-2024	SE
Arsenic	25-JAN-2024	25-JAN-2024	SE
Barium	25-JAN-2024	25-JAN-2024	SE
Beryllium	25-JAN-2024	25-JAN-2024	SE
Boron	25-JAN-2024	25-JAN-2024	SE
Cadmium	25-JAN-2024	25-JAN-2024	SE
Chromium	25-JAN-2024	25-JAN-2024	SE
Cobalt	25-JAN-2024	25-JAN-2024	SE
Copper	25-JAN-2024	25-JAN-2024	SE
Lead	25-JAN-2024	25-JAN-2024	SE
Molybdenum	25-JAN-2024	25-JAN-2024	SE
Nickel	25-JAN-2024	25-JAN-2024	SE

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599026	TCLP	Soil	22-JAN-2024	23-JAN-2024

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Selenium	25-JAN-2024	25-JAN-2024	SE
Silver	25-JAN-2024	25-JAN-2024	SE
Thallium	25-JAN-2024	25-JAN-2024	SE
Uranium	25-JAN-2024	25-JAN-2024	SE
Vanadium	25-JAN-2024	25-JAN-2024	SE
Zinc	25-JAN-2024	25-JAN-2024	SE

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
F1 (C6 to C10)	25-JAN-2024	25-JAN-2024	CK
F1 (C6 to C10) minus BTEX	25-JAN-2024	25-JAN-2024	SYS
Toluene-d8	25-JAN-2024	25-JAN-2024	CK
F2 (C10 to C16)	26-JAN-2024	26-JAN-2024	SS
F2 (C10 to C16) minus Naphthalene	29-JAN-2024	29-JAN-2024	SYS
F3 (C16 to C34)	26-JAN-2024	26-JAN-2024	SS
F3 (C16 to C34) minus PAHs	29-JAN-2024	29-JAN-2024	SYS
F4 (C34 to C50)	26-JAN-2024	26-JAN-2024	SS
Gravimetric Heavy Hydrocarbons			
Moisture Content	26-JAN-2024	26-JAN-2024	AK
Terphenyl	26-JAN-2024	26-JAN-2024	SS

O. Reg. 153(511) - VOCs (with PHC) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Dichlorodifluoromethane	25-JAN-2024	25-JAN-2024	CK
Vinyl Chloride	25-JAN-2024	25-JAN-2024	CK
Bromomethane	25-JAN-2024	25-JAN-2024	CK
Trichlorofluoromethane	25-JAN-2024	25-JAN-2024	CK
Acetone	25-JAN-2024	25-JAN-2024	CK
1,1-Dichloroethylene	25-JAN-2024	25-JAN-2024	CK
Methylene Chloride	25-JAN-2024	25-JAN-2024	CK
Trans- 1,2-Dichloroethylene	25-JAN-2024	25-JAN-2024	CK
Methyl tert-butyl Ether	25-JAN-2024	25-JAN-2024	CK
1,1-Dichloroethane	25-JAN-2024	25-JAN-2024	CK
Methyl Ethyl Ketone	25-JAN-2024	25-JAN-2024	CK
Cis- 1,2-Dichloroethylene	25-JAN-2024	25-JAN-2024	CK
Chloroform	25-JAN-2024	25-JAN-2024	CK
1,2-Dichloroethane	25-JAN-2024	25-JAN-2024	CK
1,1,1-Trichloroethane	25-JAN-2024	25-JAN-2024	CK
Carbon Tetrachloride	25-JAN-2024	25-JAN-2024	CK

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599026	TCLP	Soil	22-JAN-2024	23-JAN-2024

O. Reg. 153(511) - VOCs (with PHC) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	25-JAN-2024	25-JAN-2024	CK
1,2-Dichloropropane	25-JAN-2024	25-JAN-2024	CK
Trichloroethylene	25-JAN-2024	25-JAN-2024	CK
Bromodichloromethane	25-JAN-2024	25-JAN-2024	CK
Methyl Isobutyl Ketone	25-JAN-2024	25-JAN-2024	CK
1,1,2-Trichloroethane	25-JAN-2024	25-JAN-2024	CK
Toluene	25-JAN-2024	25-JAN-2024	CK
Dibromochloromethane	25-JAN-2024	25-JAN-2024	CK
Ethylene Dibromide	25-JAN-2024	25-JAN-2024	CK
Tetrachloroethylene	25-JAN-2024	25-JAN-2024	CK
1,1,1,2-Tetrachloroethane	25-JAN-2024	25-JAN-2024	CK
Chlorobenzene	25-JAN-2024	25-JAN-2024	CK
Ethylbenzene	25-JAN-2024	25-JAN-2024	CK
m & p-Xylene	25-JAN-2024	25-JAN-2024	CK
Bromoform	25-JAN-2024	25-JAN-2024	CK
Styrene	25-JAN-2024	25-JAN-2024	CK
1,1,2,2-Tetrachloroethane	25-JAN-2024	25-JAN-2024	CK
o-Xylene	25-JAN-2024	25-JAN-2024	CK
1,3-Dichlorobenzene	25-JAN-2024	25-JAN-2024	CK
1,4-Dichlorobenzene	25-JAN-2024	25-JAN-2024	CK
1,2-Dichlorobenzene	25-JAN-2024	25-JAN-2024	CK
Xylenes (Total)	25-JAN-2024	25-JAN-2024	SYS
1,3-Dichloropropene (Cis + Trans)	25-JAN-2024	25-JAN-2024	SYS
n-Hexane	25-JAN-2024	25-JAN-2024	CK
Toluene-d8	25-JAN-2024	25-JAN-2024	CK
4-Bromofluorobenzene	25-JAN-2024	25-JAN-2024	CK
Moisture Content	26-JAN-2024	26-JAN-2024	AK

O. Reg. 558 - Metals Full Scan

Parameter	Date Prepared	Date Analyzed	Initials
Antimony Leachate	26-JAN-2024	26-JAN-2024	SE
Arsenic Leachate	25-JAN-2024	25-JAN-2024	SE
Barium Leachate	25-JAN-2024	25-JAN-2024	SE
Beryllium Leachate	26-JAN-2024	26-JAN-2024	SE
Boron Leachate	25-JAN-2024	25-JAN-2024	SE
Cadmium Leachate	25-JAN-2024	25-JAN-2024	SE
Chromium Leachate	25-JAN-2024	25-JAN-2024	SE
Cobalt Leachate	26-JAN-2024	26-JAN-2024	SE
Copper Leachate	26-JAN-2024	26-JAN-2024	SE

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Time Markers

AGAT WORK ORDER: 24T111689
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599026	TCLP	Soil	22-JAN-2024	23-JAN-2024

O. Reg. 558 - Metals Full Scan

Parameter	Date Prepared	Date Analyzed	Initials
Lead Leachate	25-JAN-2024	25-JAN-2024	SE
Molybdenum Leachate	26-JAN-2024	26-JAN-2024	SE
Nickel Leachate	26-JAN-2024	26-JAN-2024	SE
Selenium Leachate	25-JAN-2024	25-JAN-2024	SE
Silver Leachate	25-JAN-2024	25-JAN-2024	SE
Thallium Leachate	26-JAN-2024	26-JAN-2024	SE
Uranium Leachate	25-JAN-2024	25-JAN-2024	SE
Vanadium Leachate	26-JAN-2024	26-JAN-2024	SE
Zinc Leachate	26-JAN-2024	26-JAN-2024	SE

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599057	MW208-4	Soil	18-JAN-2024	23-JAN-2024

Particle Size by Sieve (Wet)

Parameter	Date Prepared	Date Analyzed	Initials
Sieve Analysis - 75 µm (retained)	25-JAN-2024	29-JAN-2024	PC
Sieve Analysis - 75 µm (passing)	25-JAN-2024	29-JAN-2024	PC

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599058	MW208-2	Soil	18-JAN-2024	23-JAN-2024

Particle Size by Sieve (Wet)

Parameter	Date Prepared	Date Analyzed	Initials
Sieve Analysis - 75 µm (retained)	25-JAN-2024	29-JAN-2024	PC
Sieve Analysis - 75 µm (passing)	25-JAN-2024	29-JAN-2024	PC

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5599059	MW202-7	Soil	15-JAN-2024	23-JAN-2024

Particle Size by Sieve (Wet)

Parameter	Date Prepared	Date Analyzed	Initials
Sieve Analysis - 75 µm (retained)	25-JAN-2024	29-JAN-2024	PC
Sieve Analysis - 75 µm (passing)	25-JAN-2024	29-JAN-2024	PC

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE
Antimony Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Arsenic Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Barium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Beryllium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Boron Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Cadmium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Chromium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Cobalt Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Copper Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Lead Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Molybdenum Leachate	MET -93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Nickel Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Selenium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Silver Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Thallium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Uranium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Vanadium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Zinc Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Sieve Analysis - 75 µm (retained)	INOR-93-6065	Modified from ASTM D1140-17	SIEVE
Sieve Analysis - 75 µm (passing)	INOR-93-6065	Modified from ASTM D1140-17	SIEVE

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Acenaphthylene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Acenaphthene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Fluorene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Phenanthrene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Anthracene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Fluoranthene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Pyrene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Benz(a)anthracene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Chrysene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Benzo(b)fluoranthene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Benzo(k)fluoranthene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Benzo(a)pyrene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Dibenzo(a,h)anthracene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Benzo(g,h,i)perylene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Phenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Bis(2-chloroethyl)ether	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2-Chlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
o-Cresol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Bis(2-chloroisopropyl)ether	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
m & p - Cresol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4-Dimethylphenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4-Dichlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
1,2,4-Trichlorobenzene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
p-Chloroaniline	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	CALCULATION

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
2,4,6-Trichlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4,5-Trichlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
1,1-Biphenyl	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Dimethyl Phthalate	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4 and 2,6-Dinitrotoluene	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	CALCULATION
Diethyl Phthalate	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Pentachlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
3,3'-Dichlorobenzidine	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4-Dinitrophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Bis(2-Ethylhexyl)phthalate	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
phenol-d6 surrogate	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2-Fluorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4,6-Tribromophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Chrysene-d12	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
wet weight BNA	ORG-91-5114		BALANCE
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS

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Method Summary

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AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Polychlorinated Biphenyls	ORG-91-5113	modified from EPA SW-846 3570 & 8082A	GC/ECD
Decachlorobiphenyl	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
Benzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Toluene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS

AGAT Laboratories

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MISSISSAUGA, ONTARIO
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FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T111689

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:854 Burloak Drive Oakville Ontario

SAMPLED BY:AAC, JF, SKB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS

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Mississauga, Ontario, L4T 1Y2
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www.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Sara Sutherland
Address: 90 Scarsdale Road Toronto Ontario ON M3B2R7
Phone: 4165299215 Fax:
Report Information Email: 1. s.sutherland@terrapex.com
2. g.lussier@terrapex.com

Project Information:

Project: CT3959.00
Site Location: 854 Burnhamthorpe Drive Oakville Ontario
Sampled By: AAC, JF, SKB
AGAT Quote #: Sincer Downstream
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes [X] No [ ]
Company: Same as above
Contact:
Address:
Email:

Regulatory Requirements:

Please check all applicable boxes

[X] Regulation 153/04 — Table 3 — Industrial/Commercial/Community [ ] Res/Park [ ] Agricultural
[ ] Regulation 406 — Table — Indicate One
[ ] Regulation 558
[ ] CCME
[ ] Sewer Use — [ ] Sanitary [ ] Storm — (by-law)
[ ] Prov. Water Quality Objectives (PWQO)
[ ] Other
Soil Texture (Check One): [ ] Coarse [X] Fine

Is this submission for a Record of Site Condition? [X] Yes [ ] No

Report Guideline on Certificate of Analysis: [ ] Yes [ ] No

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 24T111689
Cooler Quantity: 2 large
Arrival Temperatures: 4.3 | 4.1 | 4.2 | 5.9 | 5.0 | 5.3
Custody Seal Intact: [ ] Yes [ ] No [ ] N/A
Notes: Loose ice

Turnaround Time (TAT) Required:

Regular TAT [X] 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
[ ] 1 Business Day [ ] 2 Business Days [ ] Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
* TAT is exclusive of weekends and statutory holidays
For "Same Day" analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - [ ] CrVI [ ] Hg [ ] HWSB	O. Reg 153: BTEX, F1-F4 PHCs	VOC	PAHs	PCBs	PCBs Aroclors [ ]	O. Reg 153: Hexavalent Chromium [ ] Low [ ] ORP [ ] Ext [ ] DI Leach	O. Reg 406: Regulation 406 SPLP Rainwater Leach [ ] PHCs [ ] Metals [ ] VOCs [ ] SVOCs	Regulation 406 Characterization Package [ ] CPHE Metals, BTEX, F1-F4	Corrosivity [ ] Moisture [ ] Sulphide	pH							Volatile Organics in Soil (VOC)
1. BH201-1	Jan 15/24	12:00	1	soil			X																			
2. BH201-7	Jan 15/24	13:30	2						X																	
3. BH202-3	Jan 15/24	2:30	2				X				X															
4. BH202-6	Jan 16/24	12:00	2						X																	
5. ~~BH203-3~~	~~Jan 16/24~~																									
6. BH203-6	Jan 16/24	1:00	2						X																	
7. BH204-1	Jan 16/24	2:00	1				X					X														
8. MW201-2	Jan 17/24	12:00	2				X				X															
9. ~~MW205-5~~ MW205-5	~~Jan 17/24~~	1:00	2						X																	
10. MW205-7	Jan 17/24	2:00	2						X																	
11. MW300-6	Jan 17/24	3:00	2						X																	

					Jan 23	4:13pm		
							Page 1 of 3	

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www.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Sara Sutherland
Address: 90 Scarsdale Road Toronto Ontario CAN M3B2R7
Phone: 4166299919 Fax:
Reports to be sent to: 1. Email: ssutherland@terrapex.com
2. Email: gbassier@terrapex.com

Project Information:

Project: CT3959.00
Site Location: 854 Bucknell Drive Oakville Ontario
Sampled By: AAC, JK, SKB
AGAT Quote #: Sucar Downstream

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:

Please check all applicable boxes

☑ Regulation 153/04 — Table 3 — Ind/Comm ☐ Res/Park ☐ Agriculture
☐ Soil Texture (Check One) ☐ Coarse ☑ Fine
☐ Regulation 406 — Table
☐ Regulation 558
☐ SCME
☐ Sewer Use ☐ Sanitary ☐ Storm
☐ Prov. Water Quality Objectives (PWQO)
☐ Other

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

Report Guideline on Certificate of Analysis ☐ Yes ☐ No

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 24T111689
Cooler Quantity:
Arrival Temperatures: 5 ; 4 ; 5
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays

For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC	O. Reg 153: Metals & Inorganics	O. Reg 153: Hg, CrVI, DOC	O. Reg 153: BTEX, F1-F4 PHCs	VOC	PAHs	PCBs	PCBs: Aroclors ☐	O. Reg 406: Landfill Reg. Comparison: TCLP: VOC ☐ PAH ☐ Metals ☐ Hydride ☐ Mercury ☐	O. Reg 406: Regulation 406 SPLP Rainwater Leach: VOC ☐ PAH ☐ Metals ☐ Hydride ☐ Mercury ☐	O. Reg 406: Regulation 406 Characterization Package: CH, KPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	Potentially Hazardous or High Concentration (Y/N)
1. BH207-5	Jan 18/24	10:00	2	Soil					X									
2. MW206-6	Jan 18/24	11:00	2	Soil	MW206-6				X									
3. MW208-3	Jan 18/24	12:00	2				X				X							
4. MW208-7	Jan 18/24	1:00	2						X									
5. MW210-2	Jan 18/24	2:00	2				X				X							
6. MW210-6	Jan 18/24	3:00	2						X									
7. BH211-5	Jan 18/24	4:00	2						X									
8. MW209-1	Jan 18/24	5:00	1				X				X							
9. MW9000-1	Jan 18/24	6:00	1				X				X							
10. ~~MW208-3~~	~~Jan 18/24~~																	
11. MW208-5	Jan 18/24	7:00	2						X									

Jan 23 4:15 pm

Page 2 of 3

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Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human use)

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Sam Sutherland
Address: 90 Scarsdale Road Toronto Ontario ON M3B2R7
Phone: 4165299211 Fax:
Reports to be sent to:
1. Email: ssutherland@terrapex.com
2. Email: gbusier@terrapex.com

Project Information:

Project: CT3959.00
Site Location: 854 Burloak Drive Oakville Ontario
Sampled By: AAC, JB, SRB
AGAT Quote #: Suncor Downstream
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐
Company: same as above
Contact:
Address:
Email:

Regulatory Requirements:

Please check all applicable boxes

☐ Regulation 153/04 — Table 3 — Ind/Com / Res/Park / Agri/Other
Soil Texture (Check One): ☐ Coarse ☒ Fine
☐ Regulation 406 — Table
☐ Regulation 558
☐ OCMF
☐ Sewer Use — ☐ Sanitary ☐ Storm
☐ Prov. Water Quality Objectives (PWQO)
☐ Other

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

Report Guideline on Certificate of Analysis ☐ Yes ☐ No

Laboratory Use Only

Work Order #: 24T111689
Cooler Quantity:
Arrival Temperatures:
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays
For 'Same Day' analysis, please contact your AGAT CPM

Sample Matrix Legend

GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals: ☐ Cr VI ☐ Hg ☐ HWSB	BTEX, F1-F4 + PHCs	VOCs	PAHs	PCBs	PCB Aroclors ☐	C. Reg 406: Limited Characterization (TCLP: ☐ Ni ☐ Cu ☐ Zn ☐ Pb ☐ Other ☐ Leach)	Regulation 406 BFLP Rainwater Leach: ☐ TCLP ☐ SPLP ☐ Ni ☐ Cu ☐ Zn ☐ Pb ☐ Other	Solvents: ☐ Ketones ☐ VOCs ☐ SVOCs	Full CPMS Metals, BTEX, F1-F4	Corrosivity ☐ Moisture ☐ Sulphide	Potentially Hazardous or High Concentration (Y/N)
1. TCLP	Jan 18/24	3:00 PM	5	Soil														X	
2. MW20 B-1	Jan 18/24	10:30 AM	1															X	
3. MW20 B-2	Jan 18/24	12:30 PM	1															X	
4. MW 202-2	Jan 18/24	1:30 PM	1		Jan 16th/2024													X	
5.	Jan 18/24	AM/PM																	
6.	Jan 18/24	AM/PM																	
7.	Jan 18/24	AM/PM																	
8.	Jan 18/24	AM/PM																	
9.	Jan 18/24	AM/PM																	
10.	Jan 18/24	AM/PM																	
12.	Jan 18/24	AM/PM																	

Sample Relinquished By (Print Name and Sign): Date: Time:
Sample Relinquished By (Print Name and Sign): Date: Time:
Sample Relinquished By (Print Name and Sign): Date: Time:
Sample Received By (Print Name and Sign): Jan 23 Date: 4:13 Time:
Sample Received By (Print Name and Sign): Date: Time:
Sample Received By (Print Name and Sign): Date: Time:

Page 2 of 3

VI:

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CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
90 SCARSDALE RD
TORONTO, ON M3B2R7
(905) 474-5265
ATTENTION TO: Sara Sutherland
PROJECT: CT3959.00
AGAT WORK ORDER: 24T119574
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist
WATER ANALYSIS REVIEWED BY: Yris Verastegui, Inorganic Team Lead
DATE REPORTED: Feb 16, 2024
PAGES (INCLUDING COVER): 27
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*Notes

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

ATTENTION TO: Sara Sutherland
SAMPLED BY:

O. Reg. 153(511) - PAHs (Water)

DATE RECEIVED: 2024-02-09 DATE REPORTED: 2024-02-16

		SAMPLE DESCRIPTION:		MW205	MW206	MW208	MW209	MW210	MW1000
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		2024-02-08 11:40	2024-02-08 12:07	2024-02-08 13:30	2024-02-08 11:00	2024-02-08 10:24	2024-02-08 12:11
Parameter	Unit	G / S	RDL	5638739	5638743	5638744	5638745	5638746	5638747
Naphthalene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Phenanthrene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Anthracene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Fluoranthene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(a)anthracene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Napthalene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Sediment				3	3	1	3	3	3
Surrogate	Unit	Acceptable Limits							
Naphthalene-d8	%	50-140		111	113	95	117	81	97
Acridine-d9	%	50-140		102	77	68	81	83	89
Terphenyl-d14	%	50-140		67	67	76	98	78	105

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5638739-5638747 Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amount
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopnikoff

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

DATE RECEIVED: 2024-02-09

DATE REPORTED: 2024-02-16

				SAMPLE DESCRIPTION:	MW205	MW206	MW208	MW209	MW210	MW1000
				SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
				DATE SAMPLED:	2024-02-08 11:40	2024-02-08 12:07	2024-02-08 13:30	2024-02-08 11:00	2024-02-08 10:24	2024-02-08 12:11
Parameter	Unit	G / S	RDL		5638739	5638743	5638744	5638745	5638746	5638747
Benzene	µg/L		0.20		3.46	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L		0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L		0.10		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
m & p-Xylene	µg/L		0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	µg/L		0.10		0.66	<0.10	<0.10	<0.10	<0.10	<0.10
Xylenes (Total)	µg/L		0.20		0.66	<0.20	<0.20	<0.20	<0.20	<0.20
F1 (C6 to C10)	µg/L		25		<25	<25	<25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L		25		<25	<25	<25	<25	<25	<25
F2 (C10 to C16)	µg/L		100		<100	<100	<100	<100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L		100		<100	<100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L		100		<100	<100	<100	<100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L		100		<100	<100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L		100		<100	<100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500		NA	NA	NA	NA	NA	NA
Sediment					3	3	1	3	3	3
Surrogate	Unit	Acceptable Limits								
Toluene-d8	% Recovery	60-140			86.0	102	89.2	80.0	98.0	115
Terphenyl	% Recovery	60-140			80	82	78	76	70	80

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
ATTENTION TO: Sara Sutherland
SAMPLING SITE:845 Burloak Drive, Oakville, Ontario
SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

DATE RECEIVED: 2024-02-09
DATE REPORTED: 2024-02-16

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5638739-5638747 Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amount
The C6-C10 fraction is calculated using toluene response factor.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

O. Reg. 153(511) - PHCs F1/BTEX (Water)

DATE RECEIVED: 2024-02-09

DATE REPORTED: 2024-02-16

		SAMPLE DESCRIPTION:		Trip Blank
		SAMPLE TYPE:		Water
		DATE SAMPLED:		2024-02-02
Parameter	Unit	G / S	RDL	5638749
Benzene	µg/L		0.20	<0.20
Toluene	µg/L		0.20	<0.20
Ethylbenzene	µg/L		0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20
o-Xylene	µg/L		0.10	<0.10
Xylenes (Total)	µg/L		0.20	<0.20
F1 (C6 to C10)	µg/L		25	<25
F1 (C6 to C10) minus BTEX	µg/L		25	<25
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	60-140		117

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5638749 The C6-C10 fraction is calculated using Toluene response factor.
Total C6-C10 results are corrected for BTEX contributions.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
Extraction and holding times were met for this sample.
NA = Not Applicable

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AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2024-02-09

DATE REPORTED: 2024-02-16

SAMPLE DESCRIPTION:				MW205	MW206		MW208		MW209	MW210
SAMPLE TYPE:				Water	Water		Water		Water	Water
DATE SAMPLED:				2024-02-08 11:40	2024-02-08 12:07		2024-02-08 13:30		2024-02-08 11:00	2024-02-08 10:24
Parameter	Unit	G / S	RDL	5638739	5638743	RDL	5638744	RDL	5638745	5638746
Dissolved Antimony	µg/L		1.0	<1.0	<1.0	1.0	<1.0	1.0	<1.0	<1.0
Dissolved Arsenic	µg/L		1.0	<1.0	2.0	1.0	1.6	1.0	2.7	<1.0
Dissolved Barium	µg/L		2.0	57.2	104	2.0	96.1	2.0	300	102
Dissolved Beryllium	µg/L		0.50	<0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50
Dissolved Boron	µg/L		10.0	178	227	10.0	233	10.0	2640	185
Dissolved Cadmium	µg/L		0.20	<0.20	<0.20	0.20	<0.20	0.20	<0.20	<0.20
Dissolved Chromium	µg/L		2.0	<2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0
Dissolved Cobalt	µg/L		0.50	0.64	1.16	0.50	<0.50	0.50	0.72	0.60
Dissolved Copper	µg/L		1.0	2.3	7.5	1.0	<1.0	1.0	<1.0	1.3
Dissolved Lead	µg/L		0.50	<0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50
Dissolved Molybdenum	µg/L		0.50	5.20	7.17	0.50	4.36	0.50	20.6	5.86
Dissolved Nickel	µg/L		1.0	2.0	5.1	1.0	2.6	1.0	2.7	2.9
Dissolved Selenium	µg/L		1.0	<1.0	2.4	1.0	1.3	1.0	4.6	<1.0
Dissolved Silver	µg/L		0.20	<0.20	<0.20	0.20	<0.20	0.20	<0.20	<0.20
Dissolved Thallium	µg/L		0.30	<0.30	<0.30	0.30	<0.30	0.30	<0.30	<0.30
Dissolved Uranium	µg/L		0.50	7.78	13.5	0.50	9.91	0.50	9.07	7.28
Dissolved Vanadium	µg/L		0.40	<0.40	0.52	0.40	<0.40	0.40	0.43	<0.40
Dissolved Zinc	µg/L		5.0	<5.0	<5.0	5.0	<5.0	5.0	5.8	5.7
Mercury	µg/L		0.02	<0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02
Chromium VI	µg/L		2.000	<2.000	<2.000	2.000	<2.000	2.000	<2.000	<2.000
Cyanide, WAD	µg/L		2	<2	<2	2	<2	2	<2	<2
Dissolved Sodium	µg/L		250	1270000	1100000	100	701000	50	276000	384000
Chloride	µg/L		122	2080000	1960000	122	1570000	100	1160000	889000
Electrical Conductivity	uS/cm		2	5540	5420	2	4580	2	3230	2930
pH	pH Units		NA	7.21	7.24	NA	7.12	NA	7.32	7.32

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2024-02-09

DATE REPORTED: 2024-02-16

				SAMPLE DESCRIPTION:	MW1000
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2024-02-08 12:11
Parameter	Unit	G / S	RDL		5638747
Dissolved Antimony	µg/L		1.0		<1.0
Dissolved Arsenic	µg/L		1.0		1.7
Dissolved Barium	µg/L		2.0		113
Dissolved Beryllium	µg/L		0.50		<0.50
Dissolved Boron	µg/L		10.0		259
Dissolved Cadmium	µg/L		0.20		<0.20
Dissolved Chromium	µg/L		2.0		<2.0
Dissolved Cobalt	µg/L		0.50		1.22
Dissolved Copper	µg/L		1.0		<1.0
Dissolved Lead	µg/L		0.50		<0.50
Dissolved Molybdenum	µg/L		0.50		7.13
Dissolved Nickel	µg/L		1.0		3.5
Dissolved Selenium	µg/L		1.0		3.8
Dissolved Silver	µg/L		0.20		<0.20
Dissolved Thallium	µg/L		0.30		<0.30
Dissolved Uranium	µg/L		0.50		14.1
Dissolved Vanadium	µg/L		0.40		0.49
Dissolved Zinc	µg/L		5.0		<5.0
Mercury	µg/L		0.02		<0.02
Chromium VI	µg/L		2.000		<2.000
Cyanide, WAD	µg/L		2		<2
Dissolved Sodium	µg/L		250		1010000
Chloride	µg/L		122		1960000
Electrical Conductivity	uS/cm		2		5390
pH	pH Units		NA		7.26

Certified By: Yris Verástegui

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AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2024-02-09

DATE REPORTED: 2024-02-16

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5638739-5638747 Metals analysis completed on a filtered sample.
pH is a recommended field analysis taken within 15 minutes of sample collection. Due to the potential for rapid change in sample equilibrium chemistry laboratory results may differ from field measured results
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

Trace Organics Analysis

RPT Date: Feb 16, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1/BTEX (Water)															
Benzene	5635867		<0.20	<0.20	NA	< 0.20	92%	60%	140%	91%	60%	140%	79%	60%	140%
Toluene	5635867		<0.20	<0.20	NA	< 0.20	93%	60%	140%	94%	60%	140%	82%	60%	140%
Ethylbenzene	5635867		<0.10	<0.10	NA	< 0.10	91%	60%	140%	93%	60%	140%	73%	60%	140%
m & p-Xylene	5635867		<0.20	<0.20	NA	< 0.20	93%	60%	140%	95%	60%	140%	90%	60%	140%
o-Xylene	5635867		<0.10	<0.10	NA	< 0.10	94%	60%	140%	97%	60%	140%	78%	60%	140%
F1 (C6 to C10)	5635867		<25	<25	NA	< 25	90%	60%	140%	84%	60%	140%	95%	60%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)															
Benzene	5635867		<0.20	<0.20	NA	< 0.20	92%	60%	140%	91%	60%	140%	79%	60%	140%
Toluene	5635867		<0.20	<0.20	NA	< 0.20	93%	60%	140%	94%	60%	140%	82%	60%	140%
Ethylbenzene	5635867		<0.10	<0.10	NA	< 0.10	91%	60%	140%	93%	60%	140%	73%	60%	140%
m & p-Xylene	5635867		<0.20	<0.20	NA	< 0.20	93%	60%	140%	95%	60%	140%	90%	60%	140%
o-Xylene	5635867		<0.10	<0.10	NA	< 0.10	94%	60%	140%	97%	60%	140%	78%	60%	140%
F1 (C6 to C10)	5635867		<25	<25	NA	< 25	90%	60%	140%	84%	60%	140%	95%	60%	140%
F2 (C10 to C16)	5636186		129	115	NA	< 100	120%	60%	140%	83%	60%	140%	74%	60%	140%
F3 (C16 to C34)	5636186		< 100	< 100	NA	< 100	121%	60%	140%	69%	60%	140%	66%	60%	140%
F4 (C34 to C50)	5636186		< 100	< 100	NA	< 100	82%	60%	140%	97%	60%	140%	99%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	5644752		<0.20	<0.20	NA	< 0.20	109%	50%	140%	84%	50%	140%	94%	50%	140%
Acenaphthylene	5644752		<0.20	<0.20	NA	< 0.20	98%	50%	140%	114%	50%	140%	116%	50%	140%
Acenaphthene	5644752		<0.20	<0.20	NA	< 0.20	91%	50%	140%	87%	50%	140%	95%	50%	140%
Fluorene	5644752		<0.20	<0.20	NA	< 0.20	82%	50%	140%	80%	50%	140%	84%	50%	140%
Phenanthrene	5644752		<0.10	<0.10	NA	< 0.10	81%	50%	140%	83%	50%	140%	86%	50%	140%
Anthracene	5644752		<0.10	<0.10	NA	< 0.10	81%	50%	140%	85%	50%	140%	85%	50%	140%
Fluoranthene	5644752		<0.20	<0.20	NA	< 0.20	92%	50%	140%	91%	50%	140%	95%	50%	140%
Pyrene	5644752		<0.20	<0.20	NA	< 0.20	96%	50%	140%	95%	50%	140%	100%	50%	140%
Benzo(a)anthracene	5644752		<0.20	<0.20	NA	< 0.20	69%	50%	140%	82%	50%	140%	75%	50%	140%
Chrysene	5644752		<0.10	<0.10	NA	< 0.10	75%	50%	140%	110%	50%	140%	111%	50%	140%
Benzo(b)fluoranthene	5644752		<0.10	<0.10	NA	< 0.10	87%	50%	140%	87%	50%	140%	89%	50%	140%
Benzo(k)fluoranthene	5644752		<0.10	<0.10	NA	< 0.10	103%	50%	140%	88%	50%	140%	104%	50%	140%
Benzo(a)pyrene	5644752		<0.01	<0.01	NA	< 0.01	85%	50%	140%	94%	50%	140%	88%	50%	140%
Indeno(1,2,3-cd)pyrene	5644752		<0.20	<0.20	NA	< 0.20	64%	50%	140%	84%	50%	140%	95%	50%	140%
Dibenz(a,h)anthracene	5644752		<0.20	<0.20	NA	< 0.20	62%	50%	140%	75%	50%	140%	102%	50%	140%
Benzo(g,h,i)perylene	5644752		<0.20	<0.20	NA	< 0.20	83%	50%	140%	100%	50%	140%	114%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00
ATTENTION TO: Sara Sutherland
SAMPLING SITE:845 Burloak Drive, Oakville, Ontario
SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Feb 16, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

Water Analysis

RPT Date: Feb 16, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Water)															
Dissolved Antimony	5641882		<1.0	<1.0	NA	< 1.0	102%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Arsenic	5641882		1.3	1.3	NA	< 1.0	105%	70%	130%	101%	80%	120%	111%	70%	130%
Dissolved Barium	5641882		92.9	90.3	2.8%	< 2.0	94%	70%	130%	92%	80%	120%	98%	70%	130%
Dissolved Beryllium	5641882		<0.50	<0.50	NA	< 0.50	106%	70%	130%	105%	80%	120%	109%	70%	130%
Dissolved Boron	5641882		357	352	1.4%	< 10.0	105%	70%	130%	107%	80%	120%	110%	70%	130%
Dissolved Cadmium	5641882		<0.20	<0.20	NA	< 0.20	100%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Chromium	5641882		<2.0	<2.0	NA	< 2.0	98%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Cobalt	5641882		1.12	1.02	NA	< 0.50	97%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Copper	5641882		1.0	1.2	NA	< 1.0	100%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Lead	5641882		<0.50	<0.50	NA	< 0.50	106%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Molybdenum	5641882		45.4	43.4	4.5%	< 0.50	101%	70%	130%	103%	80%	120%	105%	70%	130%
Dissolved Nickel	5641882		2.2	2.1	NA	< 1.0	97%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Selenium	5641882		1.8	1.9	NA	< 1.0	102%	70%	130%	97%	80%	120%	111%	70%	130%
Dissolved Silver	5641882		<0.20	<0.20	NA	< 0.20	100%	70%	130%	100%	80%	120%	88%	70%	130%
Dissolved Thallium	5641882		<0.30	<0.30	NA	< 0.30	100%	70%	130%	97%	80%	120%	94%	70%	130%
Dissolved Uranium	5641882		1.06	1.07	NA	< 0.50	101%	70%	130%	98%	80%	120%	101%	70%	130%
Dissolved Vanadium	5641882		0.52	0.42	NA	< 0.40	99%	70%	130%	103%	80%	120%	105%	70%	130%
Dissolved Zinc	5641882		<5.0	<5.0	NA	< 5.0	99%	70%	130%	95%	80%	120%	99%	70%	130%
Mercury	5638761		<0.02	<0.02	NA	< 0.02	100%	70%	130%	103%	80%	120%	98%	70%	130%
Chromium VI	5638739	5638739	<2.000	<2.000	NA	< 2	102%	70%	130%	100%	80%	120%	93%	70%	130%
Cyanide, WAD	5639107		<2	<2	NA	< 2	105%	70%	130%	102%	80%	120%	110%	70%	130%
Dissolved Sodium	5641882		97800	92100	6.0%	< 50	101%	70%	130%	101%	80%	120%	102%	70%	130%
Chloride	5641898		208000	209000	0.5%	< 100	96%	70%	130%	97%	80%	120%	101%	70%	130%
Electrical Conductivity	5638552		812	810	0.2%	< 2	107%	90%	110%						
pH	5638552		8.60	8.77	2.0%	NA	99%	90%	110%						

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Certified By: Iris Verástegui

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638739	MW205	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	14-FEB-2024	14-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG
Dissolved Sodium	14-FEB-2024	14-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638739	MW205	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638743	MW206	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638743	MW206	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	13-FEB-2024	13-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG
Dissolved Sodium	14-FEB-2024	14-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638743	MW206	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638744	MW208	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW

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Time Markers

AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638744	MW208	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	13-FEB-2024	13-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG
Dissolved Sodium	14-FEB-2024	14-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638744	MW208	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638745	MW209	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638745	MW209	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	13-FEB-2024	13-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG
Dissolved Sodium	13-FEB-2024	13-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638745	MW209	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638746	MW210	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	13-FEB-2024	13-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW

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Time Markers

AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638746	MW210	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG
Dissolved Sodium	13-FEB-2024	13-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638746	MW210	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638747	MW1000	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	13-FEB-2024	13-FEB-2024	DW
Dissolved Arsenic	13-FEB-2024	13-FEB-2024	DW
Dissolved Barium	13-FEB-2024	13-FEB-2024	DW
Dissolved Beryllium	13-FEB-2024	13-FEB-2024	DW
Dissolved Boron	13-FEB-2024	13-FEB-2024	DW
Dissolved Cadmium	13-FEB-2024	13-FEB-2024	DW
Dissolved Chromium	13-FEB-2024	13-FEB-2024	DW
Dissolved Cobalt	13-FEB-2024	13-FEB-2024	DW
Dissolved Copper	13-FEB-2024	13-FEB-2024	DW
Dissolved Lead	13-FEB-2024	13-FEB-2024	DW
Dissolved Molybdenum	13-FEB-2024	13-FEB-2024	DW
Dissolved Nickel	13-FEB-2024	13-FEB-2024	DW
Dissolved Selenium	13-FEB-2024	13-FEB-2024	DW
Dissolved Silver	13-FEB-2024	13-FEB-2024	DW
Dissolved Thallium	13-FEB-2024	13-FEB-2024	DW
Dissolved Uranium	13-FEB-2024	13-FEB-2024	DW
Dissolved Vanadium	13-FEB-2024	13-FEB-2024	DW
Dissolved Zinc	13-FEB-2024	13-FEB-2024	DW
Mercury	12-FEB-2024	12-FEB-2024	DL
Chromium VI	12-FEB-2024	12-FEB-2024	WZ
Cyanide, WAD	16-FEB-2024	16-FEB-2024	BG

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638747	MW1000	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Sodium	15-FEB-2024	15-FEB-2024	DW
Chloride	13-FEB-2024	13-FEB-2024	LC
Electrical Conductivity	12-FEB-2024	12-FEB-2024	ND
pH	12-FEB-2024	12-FEB-2024	ND

O. Reg. 153(511) - PAHs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	15-FEB-2024	15-FEB-2024	CA
Acenaphthylene	15-FEB-2024	15-FEB-2024	CA
Acenaphthene	15-FEB-2024	15-FEB-2024	CA
Fluorene	15-FEB-2024	15-FEB-2024	CA
Phenanthrene	15-FEB-2024	15-FEB-2024	CA
Anthracene	15-FEB-2024	15-FEB-2024	CA
Fluoranthene	15-FEB-2024	15-FEB-2024	CA
Pyrene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)anthracene	15-FEB-2024	15-FEB-2024	CA
Chrysene	15-FEB-2024	15-FEB-2024	CA
Benzo(b)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(k)fluoranthene	15-FEB-2024	15-FEB-2024	CA
Benzo(a)pyrene	15-FEB-2024	15-FEB-2024	CA
Indeno(1,2,3-cd)pyrene	15-FEB-2024	15-FEB-2024	CA
Dibenz(a,h)anthracene	15-FEB-2024	15-FEB-2024	CA
Benzo(g,h,i)perylene	15-FEB-2024	15-FEB-2024	CA
2-and 1-methyl Napthalene	15-FEB-2024	15-FEB-2024	SYS
Naphthalene-d8	15-FEB-2024	15-FEB-2024	CA
Acridine-d9	15-FEB-2024	15-FEB-2024	CA
Terphenyl-d14	15-FEB-2024	15-FEB-2024	CA
Sediment	15-FEB-2024	15-FEB-2024	SG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS

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AGAT WORK ORDER: 24T119574
PROJECT: CT3959.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638747	MW1000	Water	08-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Toluene-d8	13-FEB-2024	13-FEB-2024	VB
F2 (C10 to C16)	16-FEB-2024	16-FEB-2024	SS
F2 (C10 to C16) minus Naphthalene	16-FEB-2024	16-FEB-2024	SYS
F3 (C16 to C34)	16-FEB-2024	16-FEB-2024	SS
F3 (C16 to C34) minus PAHs	16-FEB-2024	16-FEB-2024	SYS
F4 (C34 to C50)	16-FEB-2024	16-FEB-2024	SS
Gravimetric Heavy Hydrocarbons			
Terphenyl	16-FEB-2024	16-FEB-2024	SS
Sediment	15-FEB-2024	15-FEB-2024	SG

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
5638749	Trip Blank	Water	02-FEB-2024	09-FEB-2024

O. Reg. 153(511) - PHCs F1/BTEX (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	13-FEB-2024	13-FEB-2024	VB
Toluene	13-FEB-2024	13-FEB-2024	VB
Ethylbenzene	13-FEB-2024	13-FEB-2024	VB
m & p-Xylene	13-FEB-2024	13-FEB-2024	VB
o-Xylene	13-FEB-2024	13-FEB-2024	VB
Xylenes (Total)	13-FEB-2024	13-FEB-2024	SYS
F1 (C6 to C10)	13-FEB-2024	13-FEB-2024	VB
F1 (C6 to C10) minus BTEX	13-FEB-2024	13-FEB-2024	SYS
Toluene-d8	13-FEB-2024	13-FEB-2024	VB

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
2-and 1-methyl Napthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Sediment			N/A
Benzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Toluene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F1 (C6 to C10)	VOL-91- 5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	P&T GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
F3 (C16 to C34) minus PAHs	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Benzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F1 (C6 to C10)	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 24T119574

PROJECT: CT3959.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE:845 Burloak Drive, Oakville, Ontario

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Chromium VI	INOR-93-6073	modified from SM 3500-CR B	LACHAT FIA
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Dissolved Sodium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP/MS
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE

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Laboratory Use Only

Work Order #: 24T119574

Cooler Quantity: 1 large 1 med

Arrival Temperatures: 3.9 | 4.0 | 4.7 / 2.8 | 2.2 | 2.7

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: bagged ice

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Sara Sutherland
Address: 90 Scarsdale Road
Toronto, ON M3B 2R7
Phone: 416-245-0011 Fax:
Reports to be sent to:
1. Email: s.sutherland@terrapex.com
2. Email: [illegible]@terrapex.com

Regulatory Requirements: ☐ No Regulatory Requirement

☒ Regulation 153/04 — Table 3 — ☒ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (check one): ☒ Coarse ☐ Fine
☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Regulation 558 ☐ CCME ☐ Prov. Water Quality Objectives (PWQO) ☐ Other

Is this submission for a Record of Site Condition? ☐ Yes ☒ No

Report Guideline on Certificate of Analysis: ☐ Yes ☒ No

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush surcharges apply): ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays

Project Information:

Project: CT3959.00
Site Location: 845 Burloak Drive, Oakville Ontario
Client #: 35207
Sampled By:
AGAT Quote #: SUNCOR Downstream PO:

Invoice Information: Bill To Same: Yes ☒ No ☐

Company:
Contact:
Address:
Email:

Activity
Assessment (circle one): A1 A2 A3 A4
Remediation (circle one): R1 R2 R3 R4
Contaminant Management (circle one): [illegible]

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	Metals and Inorganics	Metals (O. Reg 153)	ORPs	Full Metals Scan	Regulation/Customer Metals	Nutrients	Volatiles	PHCs F1-F4	ABNs	PAHs	PCBs Total / Aroclors	Organochlorine Pesticides	TCLP	Sewer Use	F1/BTEX					Potentially Hazardous or High Concentration (Y/N)
MW205	Feb 6 2024	11:40	13	GW		Y	☑						☑	☑		☑										
MW206	"	12:07	13	"		Y	✓						✓	✓		✓										
MW208	"	13:30	13	"		Y	✓						✓	✓		✓										
MW209	"	11:00	13	"		Y	✓						✓	✓		✓										
MW210	"	10:24	13	"		Y	✓						✓	✓		✓										
MW1000	"	12:11	13	"		Y	✓						✓	✓		✓										
TRIP BLANK	Feb 2 2024		3	W																	✓					

Samples Relinquished By (Print Name and Sign): Gavi [signature] Date: Feb 9 2024 Time: 11:34
Samples Received By (Print Name and Sign): [signature] Date: Feb 9 Time: 4:08

Samples Relinquished By (Print Name and Sign): Date: Time:
Samples Received By (Print Name and Sign): Date: Time:

Samples Relinquished By (Print Name and Sign): Date: Time:
Samples Received By (Print Name and Sign): Date: Time:

Nots used and not returned:

Page 1 of 1

APPENDIX VII
QUALIFICATIONS OF ASSESSORS

OLIVIA E. CLAXTON, BES., DIPL.

Education:	Bachelor of Environmental Studies, majored in Geography and Environmental Management	2014	University of Waterloo
	Dipl. Environmental Management and Assessment (Post Graduate)	2018	Niagara College
Professional Associations:	Eco Canada Environmental Professional (In Training) – Site Assessment and Reclamation		
Safety Training:	Standard First Aid and CPR Petroleum Oriented Safety Training (POST) Utility Infrastructure Awareness Workplace Hazardous Materials Information System (WHMIS) Working At Heights 40-hour OSHA Training Course for Hazardous Waste Operations		

EXPERIENCE

May 2018 to present – Terrapex Environmental Ltd., Hamilton, Ontario

Environmental Scientist

Duties and responsibilities include:

- Phase I Environmental Site Assessments (ESA) including record reviews, interviews, site inspections, client liason, and report preparation
- Phase II ESAs including coordination and supervision of drilling, test pitting, soil documentation and sampling, as well as the installation of monitoring wells
- Remedial programs including excavation profiling, soil documentation and sampling, and contaminated soil removal
- Maintenance and monitoring of groundwater observation wells and remediation systems
- Supervising underground storage tank removal and decommissioning
- Monitoring and sampling of groundwater monitoring wells
- Soil vapour and indoor air sampling
- Data entry and interpretation
- Writing and compiling proposals, reports and technical correspondence

January 2018 to April 2018 – Toronto and Region Conservation Authority, Concord, Ontario

Intern – Environmental Assessment Planner

Duties and responsibilities include:

- Review of minor Planning Act Applications (site plans, minor variances)
- Assist with review of Environmental Assessment applications
- Reviewing permitting requirements under Ontario Regulation 166/06
- Review of construction drawings and engineering plans
- Participate in site visits and consultation meetings
- Screening of infrastructure project sites using ArcGIS Viewer for Flex
- Drafting correspondence to municipal partners and notices for technical staff
- General file management/project management

SELECTED PROJECT EXPERIENCE

Phase One Environmental Site Assessments

Petroleum Clients: Completion of a Phase One ESA at retail gas outlets, cardlock sites, and automotive service centers in support of filing a Record of Site Conditions; including records review, interviews, site inspection, identification of Areas of Potential Environmental Concern, development of a Conceptual Site Model, and writing of the final report.

Phase II Environmental Site Assessments

Petroleum Clients: Completion of a Phase Two ESA excavation in support of filing a Record of Site Conditions at a former retail fuel outlet; including coordination of site activities with subcontractors, development of a Sampling and Analysis Plan (as per Ontario Regulation 153/04), logging of soil stratigraphy and soil vapours, collection of soil and groundwater samples for laboratory analysis of Contaminants of Concern, interpretation of laboratory results, development of a Conceptual Site Model, and report preparation.

Petroleum Clients: Supervised soil and ground water assessments at multiple bulk plants, retail fuel outlets, and cardlock facilities across Ontario, including various soil and rock drilling techniques, test pitting, and sampling on municipal roadways.

Petroleum Clients: Supervised the decommissioning of underground storage tanks, infrastructure upgrades, and/or the removal of contaminated soil at multiple retail fuel outlets across Ontario; including excavation profiling, soil documentation, and collecting confirmatory soil samples for laboratory analysis.

Petroleum Client: Conducted and coordinated a field investigation program. Work conducted included borehole drilling, monitoring well installation, groundwater monitoring and sampling and a topographic survey.

Groundwater Monitoring and Sampling

Gasoline Retailer: Weekly, monthly and quarterly groundwater and vapour monitoring at several sites in Southern Ontario.

Site Remediation

Petroleum Clients: Conducting remedial excavations in support of filing Records of Site Conditions at former retail fuel outlets, automotive service centres, and cardlock sites; including supervision of the remedial excavation activities, collecting confirmatory soil samples for laboratory analysis of Contaminants of Concern from the completed excavation, evaluation of the laboratory results, and report preparation documenting the remediation observations, findings, and results.

Petroleum Clients: Maintained and monitored groundwater observation wells at several operating petroleum retail outlets.

Pipeline Client: Emergency spill response, conducted spill response action plan to collect soil samples and identify source of leak.

Ecological Services

Pipeline Client: Natural heritage assessment including flora and fauna assessments, species at risk surveillance.

GEOFFREY L. LUSSIER, Dipl.

Position: Senior Project Manager, Burlington Office

Qualifications: Terrain and Water Resources Technology Diploma

Experience:

Terrapex Environmental Ltd.	1996 to present
Jacques Whitford Environment Limited	1995 to 1996

Mr. Lussier is a Senior Project Manager for Terrapex with over 25 years of conducting and managing site assessment and remediation projects for many industrial, government, First Nation, petroleum, and rail clients. His role includes project design, budgeting, liaison with clients and regulatory agencies, project implementation, data interpretation, reporting, remedial option feasibility study and remedial action plan design and administration.

Several years of intensive field experience provide Mr. Lussier with an excellent understanding of field operations and the ability to provide practical, efficient solutions to potential problems unique to this type of work.

Representative projects include the following:

TDL Group: Managed several phase I and phase II assessments of various properties across southern Ontario.

Petroleum Client: Managed a Phase II ESA conducted in support of a risk assessment for petroleum impacted soil at depth at a former bulk fueling facility. Managed the remediation by excavation of shallow soil exceeding the Property-Specific Standards. Prepared technical documents associated with the work in support of the Risk Assessment and submission of a Record of Site Condition.

Parkland Fuel Corporation (formerly Pioneer Energy LP): Project Manager and main contact for 100+ site assessment and site decommissioning and remediation projects at petroleum storage and distribution facilities in Ontario.

Petroleum Clients: Supervision of soil and groundwater assessments and decommissioning of underground storage tanks and the removal of contaminated soil at 100+ retail petroleum outlets and bulk fuel terminals across Ontario including Petro-Canada, Shell, Sunoco, and Ultramar.

Canadian Pacific Railway: Supervision of the excavation of 8,000 m^3 of soil impacted with diesel fuel at a decommissioned rail yard and construction of an on-site engineered bio-pile facility to treat the soil.

Ultramar Ltd.: Supervision of the excavation of 8,000 m^3 of soil impacted with fuel oil at a decommissioned bulk storage facility including the excavation, diversion and reconstruction of a portion of municipal roadway and utilities and construction of an on-site engineered bio-pile facility to treat the soil.

Royal Bank of Canada: Supervision of soil and groundwater assessments at approximately 15 real estate properties across southern Ontario.

First Nation client: Conducted a community wide assessment addressing impact on soil, groundwater and surface water, as well as a hydrogeologic study of the waste disposal site at several remote communities in Northwestern Ontario.

Federal Client: Managed Phase II/III ESAs and developed remedial feasibility options for four parcels of land in Southern Ontario.

Federal Client: Managed three Phase III ESAs and developed remedial feasibility options for three armouries in downtown Toronto, Ontario.

Federal Client: Managed and developed a Before-After Control Impact (BACI) Study Design as part of a harbour sediment dredging project.

P. JEFF STEVENSON, B.Sc., P.Geo.

Position:	Senior Project Manager and Qualified Person Branch Manager – Terrapex Hamilton Office Terrapex Board of Directors and Treasurer
Qualifications:	Professional Geoscientist (P.Geo,)QP_{ESA} B.Sc. Biology and Environmental Studies

Experience:		
	Terrapex Environmental Ltd.	2000 to present
	Conor Pacific Environmental Technologies Inc.	1996 to 2000
	Arcturus Environmental Limited	1990 to 1996

Mr. Stevenson's experience includes managing and conducting Phase I, II, and III ESAs, contaminant management plans, site decommissioning, and site remediation projects, many of which have been completed in support of filing of Records of Site Condition. He has detailed knowledge of guidelines and regulations, and assessment/remediation technologies, having designed and implemented a diverse range of projects. Mr. Stevenson has also provided testimony as expert witness and has aided in development of municipal regulations. Mr. Stevenson has considerable expertise liaising with First Nations, Tribal Councils, and municipal, provincial, and federal agency and entities, having conducted environmental projects for clients involving all levels of government and the private sector. Mr. Stevenson is a QP_{ESA} registered with the MECP and has filed over 120 Records of Site Condition from 1995 to present, some of which have involved risk assessment.

Mr. Stevenson is also the Senior Manager/Primary Contact on the Preferred Supplier Agreement Terrapex has with Suncor Energy Inc. (formerly Petro-Canada), whereby Terrapex provides environmental consulting services for the assessment, decommissioning, and remediation of petroleum retail outlets and storage/distribution facilities across Ontario. Some of his other past and present clients include Mattamy Homes Inc., Pioneer Petroleums, BG Fuels (Greenergy), Transport Canada, PWGSC, Craft Developments, City of Mississauga, City of Burlington, Clarkway Construction, Bensimon Developments, Timbercreek Homes, Valmont Industries, and many other property developers and private land owners.

Representative projects include the following:

CN Real Estate: Phase I assessments of approximately 6 Rail Yard Sites in Ontario.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Phase I assessments of 40 Canada Coast Guard, Marine Communications and Search and Rescue Sites in Ontario.

Suncor Energy Products Partnership: Ontario Regulation 153/04 compliant Phase One and Two ESAs and remedial programs to support filing of Records of Site Conditions at retail fuel outlet properties at approximately 50 sites in Ontario.

Clarkway Construction Company: Ontario Regulation 153/04 compliant Phase One ESAs to support filing of Records of Site Conditions at various development properties at approximately 10 sites in Ontario.

CRAFT Developments Corp.: Ontario Regulation 153/04 compliant Phase One and Two ESAs and remedial programs to support filing of Records of Site Conditions at various commercial development properties at approximately 5 sites in Ontario.

Mattamy Homes Inc.: Phase One ESAs to support filing of Records of Site Conditions at various residential development properties at approximately 20 sites in Ontario.

Private: Phase I assessments of approximately 150 residential, commercial, and industrial sites for various private clients.

Suncor Energy Products Partnership (formerly Petro-Canada): Senior Manager and contact for preferred supplier agreement: Project manager for 1,000+ Phase II ESAs, Designated Substance Surveys, Site Decommissioning, and Site Remediations at retail and wholesale petroleum storage and distribution facilities.

Suncor Energy Products Partnership: Acted as Expert Witness for Mediation; two sites in Ontario.

Quadra FNX Mining Ltd.: Senior Project Manager for historical research and environmental assessment of abandoned 19th century remote mine site and preparation of mine hazard inventory.

City of Mississauga: Senior Project Manager for 5 environmental site assessments including risk assessment and development and implementation of risk management plans for flyash deposits or fill materials in City park lands.

Sun-Canadian Pipe Line Company: Senior Project Manager for monitoring and assessment of systems at several pipe line valve sites and pump stations.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for Phase II assessments of 4 Canada Coast Guard, Marine Communications and Light station Sites in Ontario.

CP Rail: Field Supervisor for assessments of soil and groundwater at 8 major rail yards and subdivision in Ontario.

CN Real Estate: Field Supervisor for assessments of soil and groundwater at two major rail yards in Ontario.

Department of National Defence/Public Works Canada: Field Supervisor for an assessment of fuel oil contaminated soil at approximately 300 military housing facilities at CFB Borden.

Transport Canada: Project Manager for assessment of soil and groundwater at approximately 13 NDB and airport sites in Ontario.

Hydro One Remotes: Project Manager for assessment of soil and groundwater at a diesel generating station in Kingfisher Lake, Ontario, including remedial options feasibility study qualitative risk assessment, and development of a remedial action plan.

City of Mississauga: Preparation of Site Sensitivity Analysis for street sweepings dump sites, consultation with the City, and Phase II ESAs at two of the receiving properties.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for storage tank audits at 25 Canada Coast Guard, Marine Communications, Search and Rescue, and Light station Sites in Ontario.

Public Works and Government Services Canada/Department of Fisheries and Oceans: Project Manager for halocarbon surveys at 30 Canada Coast Guard, Marine Communications, Search and Rescue, and Light station Sites in Ontario.

Records of Site Condition: Approximately 120 Records of Site Condition prepared, submitted to and acknowledged by the MOEE, MOE, MOECC, or MECP since 1995 for various clients.

Excess Soils: Completed registration of sites on the Excess Soils Registry, beginning January 2023.

City of Burlington: Advised City of Burlington Engineering Staff and Council regarding fill issues at Burlington Executive Airpark, and provided expert witness testimony on behalf of the City for two related court actions.

Clarkway Construction: Completed Phase One and Two ESAs, and large scale site remediation using ex-situ and in-situ techniques, and Record of Site Conditions for two former industrial sites in Etobicoke.

Parking, Loading, & Stacking Lane Provisions

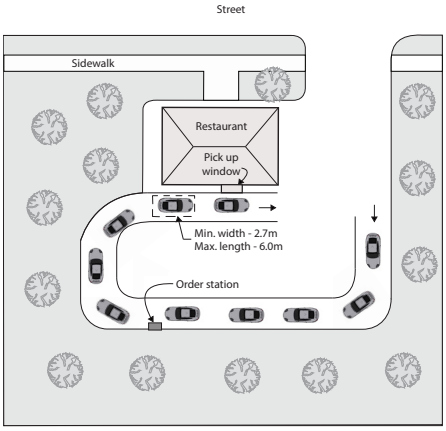
5.5 Drive-through Facilities and Stacking Lanes

5.5.1 Locations

a) The minimum setback for all points of a *drive-through facility* from any *lot line* abutting any Residential *Zone* shall be 15.0 metres.
b) A *stacking lane* shall be separate from an *aisle* or *driveway*.

5.5.2 Minimum Number of Stacking Spaces

a) Each *stacking space* in a *stacking lane* shall have a minimum width of 2.7 metres and a minimum length of 6.0 metres.
b) The minimum number of *stacking spaces* required in a *stacking lane* shall be calculated in accordance with the standards set out in Table 5.5, below.



Conceptual layout for a restaurant stacking lane.

Table 5.5: Stacking Space Requirements

Use	Minimum Number of Stacking Spaces
Financial institution	4
Motor vehicle washing facility	8 (1)
Restaurant	10 (2)
Retail store	4
School, private	10 (3)
School, public	10 (3)
Service commercial establishment	4

Additional Regulations for Stacking Spaces Table 5.5

1. An additional two *stacking spaces* are required at the exit of the *motor vehicle washing facility*.
2. Of these, seven *stacking spaces* shall be provided at or before the order station where an order station is provided.
3. Section 5.5.1 shall not apply.

5.6 Loading Spaces

Where a *loading space* is provided, the following regulations apply:

a) The minimum dimensions of a *loading space* are 3.5 metres in width and 12.0 metres in length, with a minimum vertical clearance of 4.2 metres.
b) A *loading space* shall abut the *building* for which the *loading space* is provided.
c) A *loading space* shall be set back 7.5 metres from any Residential *Zone*, except if it is located entirely within a *structure*. This subsection does not apply to a *loading space* located in a Residential *Zone*.

There is no minimum number of loading spaces required by Zoning By-law 2014-014. Should loading spaces be provided, the following regulations apply to set appropriate dimensions and locations.

A minimum requirement does apply in North Oakville.

Committee of Adjustment Application Submission Guide: Minor Variance

Town of Oakville
Building Services Department
1225 Trafalgar Road
Oakville, ON L6H 0H3
Tel: 905-845-6601
www.oakville.ca

OAKVILLE

Electronic Application Submission Process

Prior to submitting a minor variance application, applicants are encouraged to communicate with their neighbours with respect to the application.

What are the submission requirements?
The following materials will be required in a PDF file format:

- ☑ COMPLETED APPLICATION FORM including the Property Owner Authorization and Acknowledgement and Zoning Review Waiver at the end of the form – **File name should indicate 'Application Form'.**
- ☑ DRAWINGS, including a site plan, elevation drawings, and floor plans if available. – File names for drawings should indicate the first character of discipline name followed by the sheet number and drawing type (e.g. A101 – Site Plan.pdf). Files submitted with multiple drawing plan sheets will not be accepted. Refer to the chart below for sample file naming conventions.

Drawing Type	Character – Discipline	Sample File Name
Site Plan	A – Architectural	A100 – Site Plan
Elevations	A – Architectural	A200 – North Elevation
Floor Plans	A – Architectural	A300 – Ground Floor Plan
Survey Plan	C – Civil	C105 – Survey Plan
Landscape Plan	L – Landscape	L200 – Landscape Plan

- ☑ ANY SUPPORTING DOCUMENTS – File names for documents should identify the type of document, such as a Cover Letter or Planning Justification Report.

How do I submit my application?
Submit your *application request* electronically to coarequests@oakville.ca. Upon submission, your *application request* will be pre-screened for quality assurance. Please be advised that your application will only be deemed complete upon payment of town and agency fees, and a file / application number and meeting date has been provided to you.

How do I pay the application fees?
When your application request has been pre-screened and satisfactory, fee payment options and instructions will be provided, including fees for the Region of Halton and the Conservation Authority, if applicable. Please be advised that your application will only be deemed complete upon payment of town and agency fees, and a file / application number has been provided to you.

Town Application Fees – Effective January 01, 2025 and subject to change without notice

Minor Variance Fees	Amount
Base Application Fee	$ 4,182.00
Fee for residential driveways, decks, pool/hot tubs, and accessory buildings and structures under 15 m² in area only	$ 2,091.00
Deferral Fee prior to circulation of application	$ 173.00
Deferral Fee after circulation of application or at the public hearing	$ 806.00
A complete list of the rates and fees can be viewed online at https://www.oakville.ca/business/rates-fees.html	

Agency Fees – Effective January 01, 2025 and subject to change without notice

Agency	Amount
Region of Halton	$ 40.89
Conservation Authority	Contact the applicable Conservation Authority for the required fees

Further Committee of Adjustment Information:

https://www.oakville.ca/residents/committee-of-adjustment-info.html

Information on Zoning and Official Plan designations:

Interactive Maps (i.e. Zoning map)
https://www.oakville.ca/community-events/maps/

Town of Oakville Zoning By-law(s)
https://www.oakville.ca/business-development/zoning/zoning-by-laws/

Town of Oakville Official Plan(s)
https://www.oakville.ca/business-development/planning-development/official-plan/

Halton Region Official Plan
https://www.halton.ca/The-Region/Regional-Planning/Regional-Official-Plan-(ROP)-(1)

Personal information on the following forms and any supporting documentation is collected under the authority of the *Planning Act* and will be used by the Building Services Department in the processing of the Committee of Adjustment application. The information may be used by other town departments and external agencies for the purpose of assessing the proposed variance(s). This information may also be released to the public. Questions about the collection of this information should be directed to the Director of Building Services, Town of Oakville, 1225 Trafalgar Road, Oakville, ON L6H 0H3, Phone: 905-845-6601 Ext. 3195.

Committee of Adjustment
Application for Minor Variance

Town of Oakville
Building Services Department
1225 Trafalgar Road
Oakville, ON L6H 0H3
Tel: 905-845-6601
www.oakville.ca

OAKVILLE

1. Applicant Information

Name	Company		
Vasili Sarantopoulos	I.G.P. Realty Advisors Inc.		
Address	**City**	**Province**	**Postal Code**
19 Galsworthy Avenue	Scarborough	ON	M2N 2R5
E-mail	**Phone No.**	**Additional Phone No.**	
vasili@igpadvisors.ca	416-414-4901		

Applicant is: ☐ Property Owner ■ Authorized Agent of Property Owner

2. Property Information

Address	Date of acquisition by current property owner
845 Burloak Drive	

Legal Description

PART LOT 35, CON 3 TRAF SDS, PART 1 20R19151 TOGETHER WITH AN EASEMENT OVER PART 1 20R17292 AS IN HR601287 SUBJECT TO AN EASEMENT IN GROSS OVER PART 1 HR1782705 AS IN HR1782705 TOWN OF OAKVILLE

Dimensions of land affected:	Frontage (m)	Depth (m)	Area (m^2)
	70.30m	54.63m	22,006.3 M²

3. Property Owner Information *(complete if different from applicant in part 1)*

Name	Company		
SUNCOR ENERGY INC.			
Address	**City**	**Province**	**Postal Code**
3275 Rebecca St	Oakville	ON	L6L 6N5
E-mail	**Phone No.**	**Additional Phone No.**	
ajanis@suncor.com	587-645-3723		

4. Official Plan Designation and Zoning

Local (Town) Official Plan Designation	Zoning
Business Commercial	E4 Business Commercial
Regional Official Plan Designation	■ By-law 2014-014 ☐ By-law 2009-189
Urban Area	

5. Road Access and Servicing to Subject Land

Road Access:	■ Municipal road	☐ Private right-of-way	☐ Public / Private lane	☐ Provincial highway
Water:	■ Municipal water	☐ Private water system	☐ Other – specify:	
Sewage:	■ Municipal sewers	☐ Private septic system	☐ Other – specify:	
Storm Drainage:	■ Municipal sewers	☐ Swales / Ditches	☐ Other – specify:	

6. Easements or Restrictive Covenants

Are there any easements or restrictive covenants affecting the subject land? ☒ Yes ☐ No

If yes, provide a description of each easement or covenant and its effect:

PART LOT 35, CON 3 TRAF SDS, PART 1 20R19151 TOGETHER WITH AN EASEMENT OVER PART 1 20R17292 AS IN HR601287 SUBJECT TO AN EASEMENT IN GROSS OVER PART 1 HR1782705 AS IN HR1782705 TOWN OF OAKVILLE

7a. Existing Building or Structure 'A'

Use	Height (m)	Overall width and length (m)	Total floor area (m^2)
Convenience store	4.39		99.5 M
Front yard setback (m)	**Side yard setback (m)**	**Side/Flankage yard setback (m)**	**Rear yard setback (m)**

The date the existing building or structure was constructed:

7b. Existing Building or Structure 'B'

Use	Height (m)	Overall width and length (m)	Total floor area (m^2)
Front yard setback (m)	**Side yard setback (m)**	**Side/Flankage yard setback (m)**	**Rear yard setback (m)**

The date the existing building or structure was constructed:

8a. Proposed Building or Structure 'A'

Use	Height (m)	Overall width and length (m)	Total floor area (m^2)
Convenience store	4.39		42.7
Front yard setback (m)	**Side yard setback (m)**	**Side/Flankage yard setback (m)**	**Rear yard setback (m)**

8b. Proposed Building or Structure 'B'

Use	Height (m)	Overall width and length (m)	Total floor area (m^2)
Quick serve restaurant	4.39		43.2
Front yard setback (m)	**Side yard setback (m)**	**Side/Flankage yard setback (m)**	**Rear yard setback (m)**

9. Current and Previous Applications / Decisions

Are there previous Committee of Adjustment decisions for the subject land? ☐ Yes ☐ No ☐ Uncertain

If yes, provide the decision / file numbers:

Is the subject land currently, or has it ever been the subject of an application under the *Planning Act* for approval of a plan of subdivision or a consent? ☐ Yes ☐ No ☐ Uncertain

If yes, provide file number(s) and current status of application:

10. Variance Request

Application made under: ☒ Section 45 (1) of the *Planning Act* or ☐ Section 45 (2) of the *Planning Act*

Describe the variance(s) applied for:

A total of 6 stacking spaces for the drive-through, instead of the required 10 stacking spaces as per the

Note: As part of the application process, the Zoning Section will only review the requested variances for accuracy based on the information submitted, and will not be conducting a complete zoning review to identify any additional variances that may be required.

Why is it not possible to comply with the provisions of the by-law?

With the proposed stacking lane, there is not enough space on site to meet the requirements of the by-law. Increasing the length of the stacking lane would cause a lane way blockage to the front of the C-Store building's parking area, as well as block access to gasoline pump stations. We have provided supplementary reports/documentation to support our stacking lane requirements for an A&W Drive-Thru addition.

11. Declaration of Applicant / Authorized Agent

I, the undersigned, being the applicant / authorized agent, solemnly declare that all of the above statements and attached documentation are true, and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the *Canada Evidence Act*.

DECLARED BEFORE ME)
at City of Markham ,)
in the Province of Ontario ,)
this 12th day of March 20 25 .)

Signature applicant / authorized agent *(to be signed in the presence of a commissioner for taking affidavits)*

A commissioner, etc. Josh Malki

Josh Malki LSO#61266T
Name/Stamp of commissioner, etc.

12. Property Owner Authorization to Enter Property

I, the undersigned, being the registered property owner of the below noted property hereby authorize and consent to the Town of Oakville Committee of Adjustment members, Town of Oakville staff and circulated agencies to enter upon the subject property at any reasonable time for the purpose of evaluating the merits of this application.

I have the authority to bind the Corporation or Partnership, if applicable.

845 Burloak Dr, Oakville ON, L6M 4J7

Address of subject property

AJANIS Digitally signed by AJANIS Date: 2025.03.11 16:44:54 -04'00'

Signature of property owner or signing officer

AJ Janis

Print name

2025-03-11

Date

13. Property Owner Acknowledgement of Public Information

Application information is collected under the authority of the Planning Act, R.S.O. 1990, c. P.13, as amended. In accordance with Section 1.0.1 of the Act, the Town of Oakville provides public access to all *Planning Act* applications and supporting documentation submitted to the Town.

I, the undersigned, being the registered property owner of the above noted property hereby agree and acknowledge that the information contained in the application and any documentation, including reports, studies and drawings, provided in support of the request, by myself, my agents, consultants and solicitors, constitute public information and will become part of the public record. As such, and in accordance with the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. M.56, as amended or substituted from time to time, I hereby consent to the Town of Oakville making this request and its supporting documentation available to the general public, including copying, posting on the Town's website and/or releasing a copy of the request and any of its supporting documentation to any third party upon their request or otherwise, and as part of a standard distribution of copies of such documentation. I consent to the Town releasing copies of any of the documentation to additional persons, including but not limited to Members of Council and resident associations.

I have the authority to bind the Corporation or Partnership, if applicable.

AJANIS Digitally signed by AJANIS Date: 2025.03.11 16:45:02 -04'00'

Signature of property owner or signing officer

AJ Janis

Print name

2025-03-11

Date

14. Property Owner Appointment and Authorization of Agent

I, the undersigned, being the registered property owner of the above noted property hereby authorize:

Vasili Sarantopoulos / I.G.P. Realty Advisors Inc.

Authorized agent's name / company

as my agent for the purpose of submitting a Committee of Adjustment application to the Town of Oakville and acting on my/our behalf in relation to this application. The authority granted by this Agent Appointment and Authorization shall continue until I shall have revoked such authority in writing, and delivered such written revocation to the Town of Oakville Building Services Department. No such revocation shall, however, invalidate any action taken by me/our agent prior to the date the Town of Oakville Building Services Department received such written revocation.

I have the authority to bind the Corporation or Partnership, if applicable.

AJANIS Digitally signed by AJANIS Date: 2025.03.11 16:45:12 -04'00'

Signature of property owner or signing officer

AJ Janis

Print name

2025-03-11

Date

15. Zoning Review Waiver

845 Burloak Dr, Oakville ON, L6M 4J7

Address of subject property

I, the undersigned, being the applicant or authorized agent wish to proceed with an application to the Committee of Adjustment for the above noted property without the benefit of a full zoning review and having variances identified and confirmed through the building permit process.

I assume full responsibility for identifying, correctly and completely, all required variances with the proposal for the above noted property and recognize that any errors may result in:

- Delays in processing of my application(s);
- Inability to obtain a building permit; and/or,
- Requirement for additional application(s) to the Committee of Adjustment (i.e. minor variance application).

Signature of applicant / authorized agent	Vasili Sarantopoulos Print name	2025-03-12 Date