SUBSURFACE ENVIRONMENTAL SITE ASSESSMENT

375 MICHIGAN AVENUE
BUFFALO, ERIE COUNTY, NEW YORK

PREPARED FOR:

NORSTAR DEVELOPMENT USA, L.P. AND NORSTAR BUILDING CORPORATION
200 SOUTH DIVISION STREET
BUFFALO, NEW YORK, 14204

PREPARED BY:

960 BUSTI AVENUE
SUITE B-150
BUFFALO, NEW YORK, 14213

August 2020

Prepared By: Peter J. Gorton, MPH CHCM	**Signature:**	**Date:** **August 2020**	**Title:** BE3 – PM
Reviewed By: Jason M. Brydges, PE	**Signature:**	**Date:** August 2020	**Title:** BE3 – PM

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1.0 INTRODUCTION

1.1 PURPOSE

Brydges Environment, Engineering, Energy (BE3) performed a subsurface environmental site assessment (ESA) at 375 Michigan Avenue, Buffalo, New York (see **Figure 1**). The Phase I ESA revealed the following Recognized Environmental Conditions (RECs) in connection with the properties:

• Historically, according to Sanborn maps of the property (listed as 403 Michigan Street), from the 1930s to 1950s a gas station as well as an auto repair shop was present in the northwest corner of the property. The removal/presence of any USTs is unknown.

• From at least 1930 to at least 1955 the property at 383 Michigan Street, which is now part of the vacant property, was a Tailor. In 1950 Rear Twin Cleaners was also listed on this property.

The subsurface soil assessment was focused in those areas **(Refer to Figure 2).** The purpose of the assessment was to obtain additional information and data for assessing potential environmental impacts at the property.

1.2 BACKGROUND

1.2.1 General Site Setting

The property is located in the block bounded by East Eagle Street to the north; South Division Street to the south; Michigan Avenue to the west and Minnie Gillette Drive to the east. The 375 Michigan Avenue parcel is currently occupied by SunRise II MiniMart in the northwest portion of the property at the southeast corner of Michigan and East Eagle Streets. The remaining area of the property is vacant, grass covered land. The parcel is about 100 yards northeast of the Erie County Public Safety Campus which is an adjacent property across Michigan Avenue. The property is slightly more than a half-mile east-southeast of Buffalo City Hall and slightly less than a mile east of Lake Erie. The immediate area around the property is along the eastern end of the downtown business district of the city and contains mainly commercial/office space with some buildings converted to mixed use residential. A large residential housing complex is located east of the property and the Norstar Office is located immediately south along South Division Street.

1.2.2 Physical Setting

Local area topography is generally level. Surface relief in the immediate vicinity of the subject property is relatively uniform, with overall gentle downward slopes to the south-southwest, towards Lake Erie. The middle of the 375 Michigan Avenue parcel is located at approximately latitude 42.882563º N; Longitude 78.868231º W and is 603 feet above sea level. The parcel currently includes the Sun Rise Mini-Mart, (formerly a KFC restaurant) which is in the northwest corner of the parcel. The 1-story, 2,352 square foot slab-on-grade structure was constructed in 1997. Asphalt covered drive and parking surround the immediate building area. The structure includes a mini convenient store portion with shelves of products and a small kitchen area which is currently unused. The remaining area of the parcel is grass covered. Large sized gravel and some asphalt was observed across the parcel and is the remains of its former use as a parking lot.

1.2.3 Historical Use

Historical records indicate that the property was a large parking lot from the late 1950's through the 1990s. Prior to that the property was a typical city block with multiple residential or store fronts. Two of the parcels within these city blocks contained uses that potentially could create environmental impacts. Historic maps during this time indicate that an auto repair shop and gas station were located on the northwest corner of the property from the 1930s to the 1950s along with an electrical storage/repair shop. From at least 1930 to at least 1955 the property at 383 Michigan Street, which is now part of the vacant property, was a Tailor. In 1950 Rear Twin Cleaners was also listed on this property.

1.2.4 Contaminants of Concern

The history and use of the two properties mentioned above which are now contained in the 375 Michigan Avenue property suggests two potential contaminants of concern based on historical use as follows:

- Potential of gasoline, fuel oil and other petroleum-related compounds associated with the gas station and vehicle repair at 403 Michigan Avenue; and
- Solvents associated with potential dry-cleaning at 383 Michigan Avenue

1.3 SCOPE

The scope involved BE3 conducting soil screening and sampling to investigate subsurface conditions at the property. BE3 advanced 8borings over a one-day period and collected two (2) soil samples for laboratory analysis. The objective of the samples was to focus on the most impacted soil based on visual observation and field organic vapor monitoring. However, none of the borings encountered impacted soil or groundwater. The two samples collected were chosen to represent the soil encountered at the two separate areas identified above. Samples were analyzed for volatile organic compounds (VOCs). The focus was on petroleum CP-51 VOCs in the former gasoline station area and chlorinated solvents in the former tailor/cleaner area. A BE3 field technician/geologist logged all samples and performed visual and field screening of all soil for volatile organic compound (VOC) concentrations using a photoionization detector (PID).

Since none of the borings encountered groundwater, temporary wells were not installed, and no groundwater was sampled.

2.0 FIELD INVESTIGATIONS

The subsurface assessment field work was completed on a single day on July 23, 2020. A photolog of field operations is included as **Appendix 1,** and a summary of the field investigation methodology and findings is presented in Sections 2.1 through 2.3.

2.1 SOIL SAMPLING

A total of eight (8) Geoprobe® soil borings designated BH-1 through BH-8 were advanced at specific locations on the former 403 Michigan Avenue property and on the 383 Michigan Avenue property (refer to attached **Figure 2**). Soil borings were field located to assess the subsurface specific to previous property use.

The Geoprobe field work was performed by BE3 and Natures Way Contracting (Geoprobe operator).

Borings were advanced to an average depth of 12 feet below ground surface (bgs). The borings were completed using a fully equipped truck mounted Geoprobe® unit which employs direct push technology. Continuous soil sampling was performed using Macro Core soil samplers measuring 4-feet in length resulting in distinct sample cores (i.e., 0-4', 4-8', 8-12' and 12-16'). Each of the samplers was fitted with a new acetate liner prior to use.

Soil from each soil core was visually described and field screening of soil for volatile organic compound (VOC) concentrations was completed using a PID - MiniRae with a 10.2 eV Lamp). A total of two (2) subsurface soil samples were collected as follows:

- BH-5 at 8 feet bgs. Total depth of boring was 8 feet bgs;
- BH-8 at 5.5-6 feet bgs. Total depth of boring was 12 feet bgs;

Soil samples were collected to reflect soil from each location of potential impact. The soil samples were submitted to Paradigm a NYSDEC approved laboratory for analysis (refer to Section 2.3).

Stratification of material in the borings and observations were noted on boring logs (refer to **Appendix A**). Photographs of field activities are contained in **Appendix B**. Prior to conducting the subsurface investigation, all utilities were located, and areas identified. All sampling tools were cleaned with Alconox, double rinsed with tap water and rinsed with distilled water between sample collection points. All soil borings were backfilled and sealed with native soil and an asphalt patch when appropriate (two borings were completed in soil areas).

2.2 Soil Screening

Field screening consisted of using a PID to screen for total volatile organic compounds and by visual and olfactory observations. Soil cores from boreholes were transported to a staging area adjacent to each borehole. The acetate liners were cut, and the length of the core was examined visually and with the PID. Odors, PID results, if any and observations were noted on the boring logs. None of the boreholes had odors or PID readings above background. There was no indication of environmental impact in any of the borings. None of the borings had any indication of water and therefore no groundwater wells were installed, and no groundwater was sampled.

3.0 RESULTS

3.1 Subsurface Conditions

The borings indicate that subsurface conditions generally consisted of fill material to about 1-2 feet in most locations consisting of stone from the former parking area and silty soil with some pieces of concrete, brick and wood. This is deeper in areas of former building locations. Below the fill is stiff, tight red-brown clay to 12 feet at least. In some locations this was less stiff at deeper depths. Boreholes were completed at 8 to 12 feet bgs with borehole BH-1 completed at 20 feet bgs. .

3.2 Analytical Results

Soil Samples

There was no indication of subsurface impacts from petroleum or solvents in any of the borings. A total of two samples were collected to confirm visual and field screening observations as noted in Section 2.1. The results did not indicate the presence of volatile organic compounds in either soil sample.

4.0 CONCLUSIONS

The purpose of this assessment was to identify potential environmental impacts at 375 Michigan Avenue, Buffalo, New York. (see attached figures). The history and use of two former properties which are now contained in the 375 Michigan Avenue property suggests two potential contaminants of concern based on historical use as follows:

- Potential of gasoline, fuel oil and other petroleum-related compounds associated with the gas station and vehicle repair at 403 Michigan Avenue; and
- Solvents associated with potential dry-cleaning at 383 Michigan Avenue

Field observations and screening as well as the laboratory results did not indicate any soil impacts in this limited subsurface soil assessment.

5.0 WARRANTS AND LIMITATIONS

This report is based on information from limited soil and groundwater sampling and visual observations of the soils as well as a review of previous Phase I ESA at the property. This report is intended exclusively for the purpose outlined herein at the site location and project indicated.

This report is intended for the sole use of Norstar. The scope of services performed in this assessment may not be appropriate to satisfy the needs of other users and any use or reuse of this document or the findings, conclusions, or recommendations presented, is at the sole risk of the user.

The conclusions set forth in this report are based upon, and limited by, the analytical data and other information available. It should be noted that all surface and subsurface environmental assessments are inherently limited in the sense that conclusions are drawn, and recommendations developed from information obtained from limited data and site evaluation at a specific time. The passage of time may result in a change in environmental circumstances at this site and surrounding properties, or petroleum/hazardous materials beneath the surface may be present but undetectable during this limited subsurface assessment. Opinions and recommendations presented herein apply to the site conditions existing at the time of the subsurface assessment and those reasonably foreseeable. They cannot necessarily apply to site changes, which are not made aware and therefore not been evaluated.

6.0 PROFESSIONAL STATEMENT/SIGNATURE

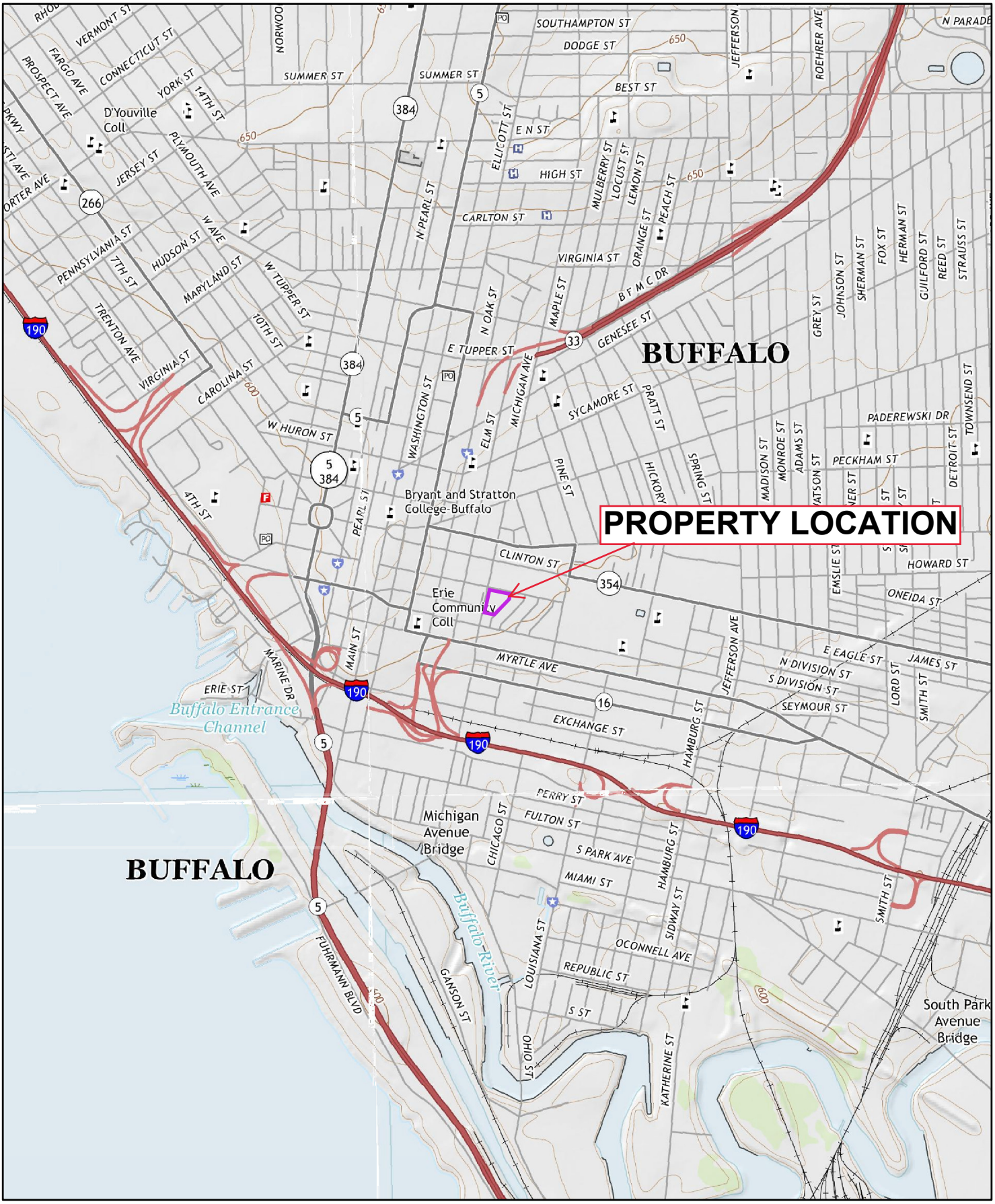
This subsurface assessment at 375 Michigan Avenue, Buffalo, New York was performed in conformance with the scope and limitations of ASTM Practice E 1903-11 for the specific objectives specified in the report and was completed based on the scope of work provided by the banks' consultant. I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in 312.10 of 40CFR312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR 312.

Peter J Gorton

8-17-2020

Peter J Gorton, MPH; CHCM — Date

FIGURES



2016

0 0.2 0.4 0.8 Miles

Order No. 20200513022

Quadrangle(s): Buffalo NE,NY

Source: USGS 7.5 Minute Topographic Map

FIGURE 1: Property Location

FIGURE 2: Property Location and borehole locations

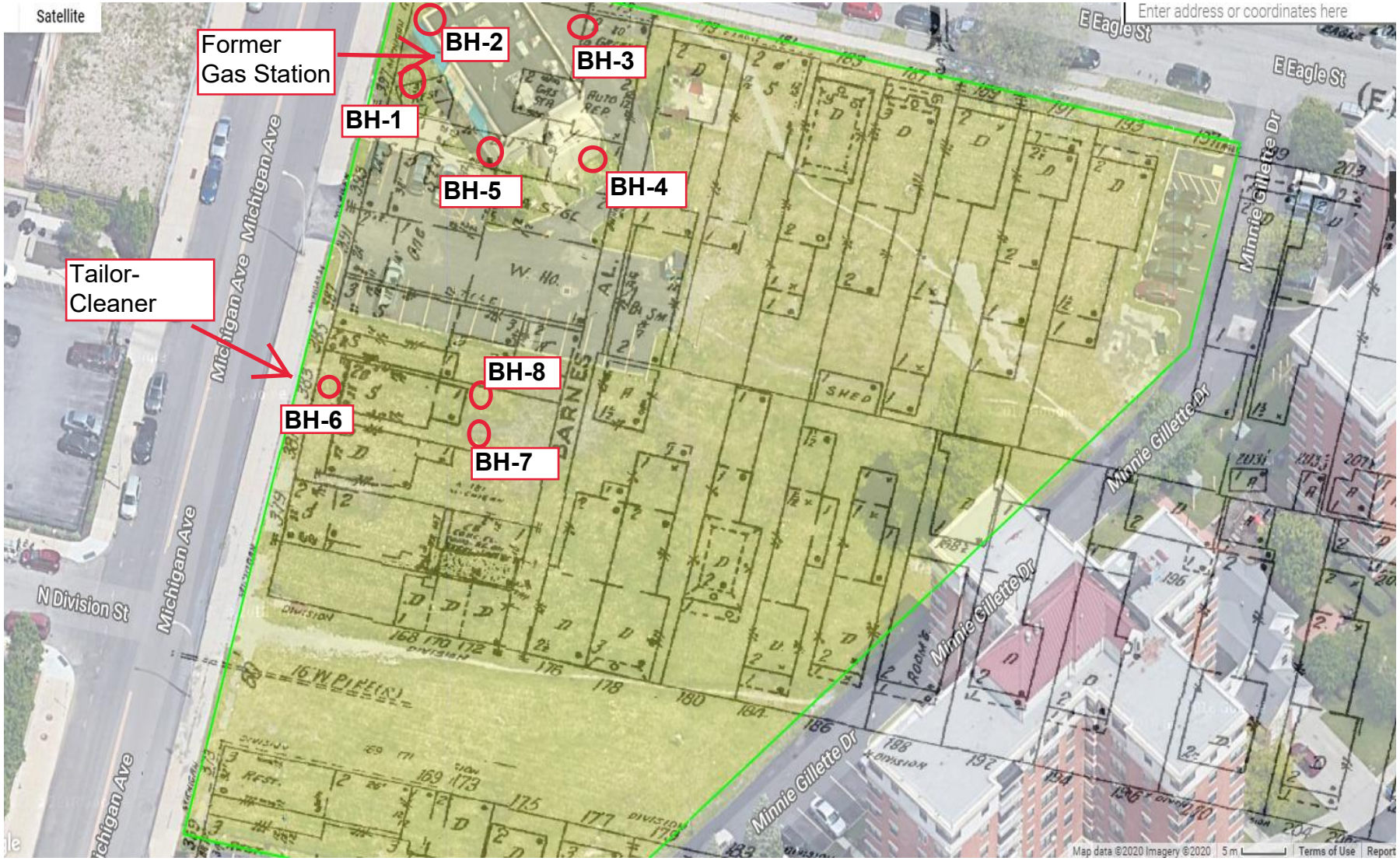


FIGURE 3: Phase II ESA Boring Locations
Source: 2017 Aerial with 1950 Sanborn Overlay

APPENDICES

APPENDIX 1

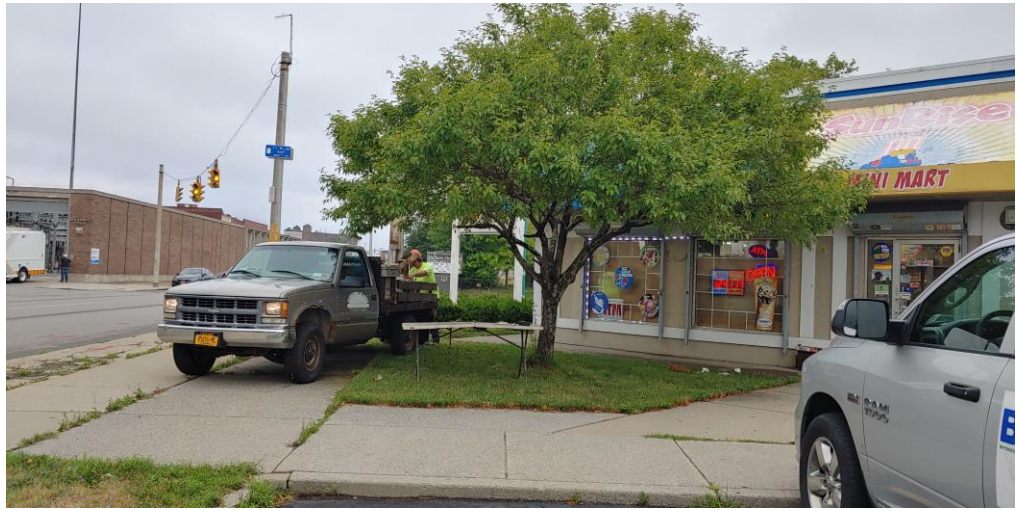
PHOTOGRAPHS

BE3 Photolog

Date: 7/23/20

1. Location of Borehole BH-1 from north at corner of Michigan and East Eagle Streets facing south

2. Location of BH-1 from west facing east



3. Location of BH-1 from south facing north

4. Soil cores BH-1

BE3 Photolog

Date: 7/23/20

5. Location of BH-2 from west facing east

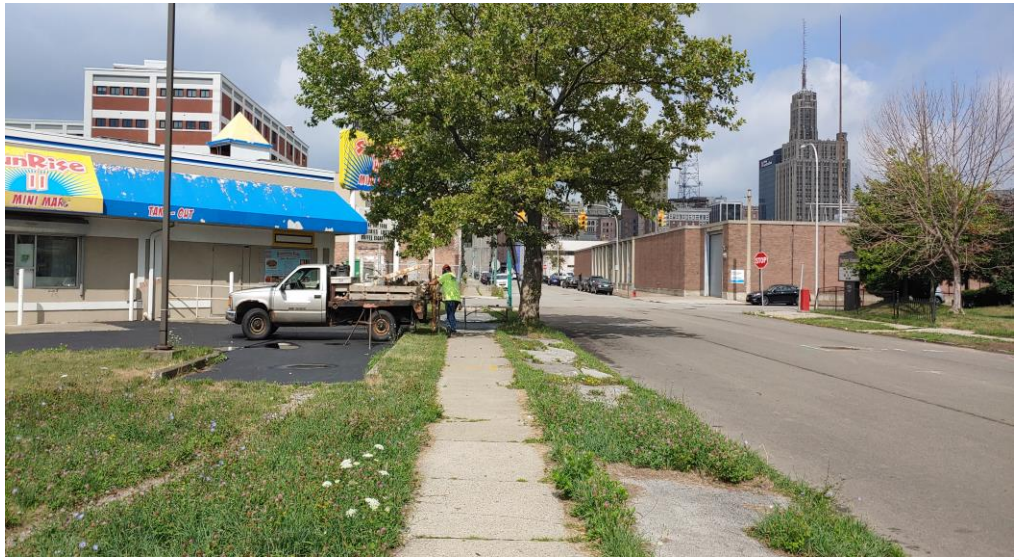
6. Location of BH-2 from northwest corner of property facing south

7. Soil cores from BH-2

8. Location of Borehole BH-3 from north facing south

BE3 Photolog

Date: 7/23/20



9. Location of BH-3 from east facing west

10. Soil cores from BH-3

11. Location of Borehole BH-4 from south facing north

12. Location of BH-4 from west facing east

BE3 Photolog

Date: 7/23/20

13. Soil cores from BH-4

14. Location of Borehole BH-5 from west facing east

15. Location of Borehole BH-5 from south facing north

16. Soil Cores from BH-5

BE3 Photolog

Date: 7/23/20

17. Location of Borehole BH-6 (Top of Berm) from west facing east

18. Location of Borehole BH-6 from south facing north

19. Location of BH-6 from east facing west

20. Soil Cores from BH-6

BE3 Photolog

Date: 7/23/20

21. Location of Borehole BH-7 from west facing east

22. Location of BH-7 from south facing north

23. Location of Borehole BH-8 from south facing north

24. Location of borehole BH-8 from east facing west

BE3 Photolog

Date: 7/23/20

25. Borehole BH-8 soil cores

APPENDIX 2

LAB DATA

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

BE3

For Lab Project ID

203419

Referencing

375 Michigan

Prepared

Tuesday, August 4, 2020

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-5 8 FT		
Lab Sample ID:	203419-01	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.30	ug/Kg		7/30/2020 20:31
1,1,2,2-Tetrachloroethane	< 7.30	ug/Kg		7/30/2020 20:31
1,1,2-Trichloroethane	< 7.30	ug/Kg		7/30/2020 20:31
1,1-Dichloroethane	< 7.30	ug/Kg		7/30/2020 20:31
1,1-Dichloroethene	< 7.30	ug/Kg		7/30/2020 20:31
1,2,3-Trichlorobenzene	< 18.2	ug/Kg		7/30/2020 20:31
1,2,4-Trichlorobenzene	< 18.2	ug/Kg		7/30/2020 20:31
1,2,4-Trimethylbenzene	< 7.30	ug/Kg		7/30/2020 20:31
1,2-Dibromo-3-Chloropropane	< 36.5	ug/Kg		7/30/2020 20:31
1,2-Dibromoethane	< 7.30	ug/Kg		7/30/2020 20:31
1,2-Dichlorobenzene	< 7.30	ug/Kg		7/30/2020 20:31
1,2-Dichloroethane	< 7.30	ug/Kg		7/30/2020 20:31
1,2-Dichloropropane	< 7.30	ug/Kg		7/30/2020 20:31
1,3,5-Trimethylbenzene	< 7.30	ug/Kg		7/30/2020 20:31
1,3-Dichlorobenzene	< 7.30	ug/Kg		7/30/2020 20:31
1,4-Dichlorobenzene	< 7.30	ug/Kg		7/30/2020 20:31
1,4-Dioxane	< 73.0	ug/Kg		7/30/2020 20:31
2-Butanone	< 36.5	ug/Kg		7/30/2020 20:31
2-Hexanone	< 18.2	ug/Kg		7/30/2020 20:31
4-Methyl-2-pentanone	< 18.2	ug/Kg		7/30/2020 20:31
Acetone	< 36.5	ug/Kg		7/30/2020 20:31
Benzene	< 7.30	ug/Kg		7/30/2020 20:31
Bromochloromethane	< 18.2	ug/Kg		7/30/2020 20:31
Bromodichloromethane	< 7.30	ug/Kg		7/30/2020 20:31
Bromoform	< 18.2	ug/Kg		7/30/2020 20:31
Bromomethane	< 7.30	ug/Kg		7/30/2020 20:31
Carbon disulfide	< 7.30	ug/Kg		7/30/2020 20:31
Carbon Tetrachloride	< 7.30	ug/Kg		7/30/2020 20:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-5 8 FT		
Lab Sample ID:	203419-01	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Chlorobenzene	< 7.30	ug/Kg	7/30/2020	20:31
Chloroethane	< 7.30	ug/Kg	7/30/2020	20:31
Chloroform	< 7.30	ug/Kg	7/30/2020	20:31
Chloromethane	< 7.30	ug/Kg	7/30/2020	20:31
cis-1,2-Dichloroethene	< 7.30	ug/Kg	7/30/2020	20:31
cis-1,3-Dichloropropene	< 7.30	ug/Kg	7/30/2020	20:31
Cyclohexane	< 36.5	ug/Kg	7/30/2020	20:31
Dibromochloromethane	< 7.30	ug/Kg	7/30/2020	20:31
Dichlorodifluoromethane	< 7.30	ug/Kg	7/30/2020	20:31
Ethylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
Freon 113	< 7.30	ug/Kg	7/30/2020	20:31
Isopropylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
m,p-Xylene	< 7.30	ug/Kg	7/30/2020	20:31
Methyl acetate	< 7.30	ug/Kg	7/30/2020	20:31
Methyl tert-butyl Ether	< 7.30	ug/Kg	7/30/2020	20:31
Methylcyclohexane	< 7.30	ug/Kg	7/30/2020	20:31
Methylene chloride	< 18.2	ug/Kg	7/30/2020	20:31
Naphthalene	< 18.2	ug/Kg	7/30/2020	20:31
n-Butylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
n-Propylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
o-Xylene	< 7.30	ug/Kg	7/30/2020	20:31
p-Isopropyltoluene	< 7.30	ug/Kg	7/30/2020	20:31
sec-Butylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
Styrene	< 18.2	ug/Kg	7/30/2020	20:31
tert-Butylbenzene	< 7.30	ug/Kg	7/30/2020	20:31
Tetrachloroethene	< 7.30	ug/Kg	7/30/2020	20:31
Toluene	< 7.30	ug/Kg	7/30/2020	20:31
trans-1,2-Dichloroethene	< 7.30	ug/Kg	7/30/2020	20:31
trans-1,3-Dichloropropene	< 7.30	ug/Kg	7/30/2020	20:31
Trichloroethene	< 7.30	ug/Kg	7/30/2020	20:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-5 8 FT		
Lab Sample ID:	203419-01	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Trichlorofluoromethane	< 7.30	ug/Kg	7/30/2020	20:31
Vinyl chloride	< 7.30	ug/Kg	7/30/2020	20:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**116**	80.8 - 134		7/30/2020	20:31
4-Bromofluorobenzene	**61.2**	54.9 - 132		7/30/2020	20:31
Pentafluorobenzene	**97.9**	85.8 - 114		7/30/2020	20:31
Toluene-D8	**81.0**	81 - 117		7/30/2020	20:31

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x72163.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-8 5.5-6 FT		
Lab Sample ID:	203419-02	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.32	ug/Kg		7/30/2020 20:53
1,1,2,2-Tetrachloroethane	< 7.32	ug/Kg		7/30/2020 20:53
1,1,2-Trichloroethane	< 7.32	ug/Kg		7/30/2020 20:53
1,1-Dichloroethane	< 7.32	ug/Kg		7/30/2020 20:53
1,1-Dichloroethene	< 7.32	ug/Kg		7/30/2020 20:53
1,2,3-Trichlorobenzene	< 18.3	ug/Kg		7/30/2020 20:53
1,2,4-Trichlorobenzene	< 18.3	ug/Kg		7/30/2020 20:53
1,2,4-Trimethylbenzene	< 7.32	ug/Kg		7/30/2020 20:53
1,2-Dibromo-3-Chloropropane	< 36.6	ug/Kg		7/30/2020 20:53
1,2-Dibromoethane	< 7.32	ug/Kg		7/30/2020 20:53
1,2-Dichlorobenzene	< 7.32	ug/Kg		7/30/2020 20:53
1,2-Dichloroethane	< 7.32	ug/Kg		7/30/2020 20:53
1,2-Dichloropropane	< 7.32	ug/Kg		7/30/2020 20:53
1,3,5-Trimethylbenzene	< 7.32	ug/Kg		7/30/2020 20:53
1,3-Dichlorobenzene	< 7.32	ug/Kg		7/30/2020 20:53
1,4-Dichlorobenzene	< 7.32	ug/Kg		7/30/2020 20:53
1,4-Dioxane	< 73.2	ug/Kg		7/30/2020 20:53
2-Butanone	< 36.6	ug/Kg		7/30/2020 20:53
2-Hexanone	< 18.3	ug/Kg		7/30/2020 20:53
4-Methyl-2-pentanone	< 18.3	ug/Kg		7/30/2020 20:53
Acetone	< 36.6	ug/Kg		7/30/2020 20:53
Benzene	< 7.32	ug/Kg		7/30/2020 20:53
Bromochloromethane	< 18.3	ug/Kg		7/30/2020 20:53
Bromodichloromethane	< 7.32	ug/Kg		7/30/2020 20:53
Bromoform	< 18.3	ug/Kg		7/30/2020 20:53
Bromomethane	< 7.32	ug/Kg		7/30/2020 20:53
Carbon disulfide	< 7.32	ug/Kg		7/30/2020 20:53
Carbon Tetrachloride	< 7.32	ug/Kg		7/30/2020 20:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-8 5.5-6 FT		
Lab Sample ID:	203419-02	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Chlorobenzene	< 7.32	ug/Kg	7/30/2020	20:53
Chloroethane	< 7.32	ug/Kg	7/30/2020	20:53
Chloroform	< 7.32	ug/Kg	7/30/2020	20:53
Chloromethane	< 7.32	ug/Kg	7/30/2020	20:53
cis-1,2-Dichloroethene	< 7.32	ug/Kg	7/30/2020	20:53
cis-1,3-Dichloropropene	< 7.32	ug/Kg	7/30/2020	20:53
Cyclohexane	< 36.6	ug/Kg	7/30/2020	20:53
Dibromochloromethane	< 7.32	ug/Kg	7/30/2020	20:53
Dichlorodifluoromethane	< 7.32	ug/Kg	7/30/2020	20:53
Ethylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
Freon 113	< 7.32	ug/Kg	7/30/2020	20:53
Isopropylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
m,p-Xylene	< 7.32	ug/Kg	7/30/2020	20:53
Methyl acetate	< 7.32	ug/Kg	7/30/2020	20:53
Methyl tert-butyl Ether	< 7.32	ug/Kg	7/30/2020	20:53
Methylcyclohexane	< 7.32	ug/Kg	7/30/2020	20:53
Methylene chloride	< 18.3	ug/Kg	7/30/2020	20:53
Naphthalene	< 18.3	ug/Kg	7/30/2020	20:53
n-Butylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
n-Propylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
o-Xylene	< 7.32	ug/Kg	7/30/2020	20:53
p-Isopropyltoluene	< 7.32	ug/Kg	7/30/2020	20:53
sec-Butylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
Styrene	< 18.3	ug/Kg	7/30/2020	20:53
tert-Butylbenzene	< 7.32	ug/Kg	7/30/2020	20:53
Tetrachloroethene	< 7.32	ug/Kg	7/30/2020	20:53
Toluene	< 7.32	ug/Kg	7/30/2020	20:53
trans-1,2-Dichloroethene	< 7.32	ug/Kg	7/30/2020	20:53
trans-1,3-Dichloropropene	< 7.32	ug/Kg	7/30/2020	20:53
Trichloroethene	< 7.32	ug/Kg	7/30/2020	20:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 203419

Client: **BE3**

Project Reference: 375 Michigan

Sample Identifier:	BH-8 5.5-6 FT		
Lab Sample ID:	203419-02	**Date Sampled:**	7/23/2020
Matrix:	Soil	**Date Received:**	7/24/2020

Trichlorofluoromethane	< 7.32	ug/Kg		7/30/2020	20:53
Vinyl chloride	< 7.32	ug/Kg		7/30/2020	20:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**124**	80.8 - 134		7/30/2020	20:53
4-Bromofluorobenzene	**64.6**	54.9 - 132		7/30/2020	20:53
Pentafluorobenzene	**106**	85.8 - 114		7/30/2020	20:53
Toluene-D8	**76.9**	81 - 117	*	7/30/2020	20:53

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x72164.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 2

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		
CLIENT:	BE3	CLIENT:		LAB PROJECT ID: 203419
ADDRESS:	960 Busti Suite B-150	ADDRESS:		
CITY:	Buffalo STATE: NY ZIP 14213	CITY: STATE: ZIP:		Quotation #:
PHONE:	716-308-8220	PHONE:		Email:
ATTN:	Peter J. Gorton	ATTN:		

PROJECT REFERENCE

375 Michigan

Matrix Codes:

AQ - Aqueous Liquid	**WA** - Water	**DW** - Drinking Water	**SO** - Soil	**SD** - Solid	**WP** - Wipe	**OL** - Oil
NQ - Non-Aqueous Liquid	**WG** - Groundwater	**WW** - Wastewater	**SL** - Sludge	**PT** - Paint	**CK** - Caulk	**AR** - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	CP51 + Solvents	Full list + VOC	per SP	GP 7/27/2020	REMARKS	PARADIGM LAB SAMPLE NUMBER
7-23-20	1220		X	BH-5 8FT	SO	1	X					01
7-23-20	250		X	BH-8 5.5-6FT	SO	1	X					02

Turnaround Time		Report Supplements		
Availability contingent upon lab approval; additional fees may apply.				
Standard 5 day	☐	None Required	☑	None Required ☒
10 day	☒	Batch QC	☐	Basic EDD ☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD ☐
Rush 2 day	☐	Category B	☐	
Rush 1 day	☐			
Date Needed _____ please indicate date needed: _____		Other ☐ please indicate package needed: _____		Other EDD ☐ please indicate EDD needed: _____

Peter J. Gorton 7-23-20 1220-250
Sampled By Date/Time

Peter Gorton 7-24-20
Relinquished By Date/Time

Brian Zeeb 7-24-20 1:25
Received By Date/Time

2P2 7/24/2020 15:49
Received @ Lab By Date/Time

3°C iced 7/24/2020 15:34

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: BE3 **Completed by:** Glenn Perello

Lab Project ID: 203419 **Date:** 7/27/2020

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X	X 5035	
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		
Comments	3°C iced		
Compliant Sample Quantity/Type	X		
Comments			

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APPENDIX 3

BORING LOGS

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-1**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	
1					0-1 feet Silt fill; stone/gravel at 1 foot
2					
3					1-3 feet sandy clayey silt
4					3-4 Sandy silty clay; red-brown
5					
6					4-6 feet red-brown clay
7					
8					6-8 feet - red-brown clay; stiff/tight
9					
10					
11					
12					8-12 feet - red-brown clay; soft at 10-12 feet
13					
14					
15					
16					12-16 feet - brown clay; soft
17					
18					
19					
20					16-20 feet - brown clay; soft End of Boring

Comments: 0 PPM on PID
No visual observation of impacts - no odoros - No sample taken

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-2**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	
1					
2					
3					
4					0-4 feet - silt fill; brick, stone, ash towards 4 feet
5					
6					
7					
8					4-8 feet - red-brown clay; stiff/tight
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors - No sample taken

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-3**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	
1					
2					0-2 feet - fill - stone/gravel. 1-2 feet possible old parking lot
3					
4					2-4 feet - red-brown clay; stiff
5					
6					
7					
8					4-8 feet - red-brown clay; stiff/tight
9					
10					
11					
12					8-12 feet - red-brown clay
					End of Borehole
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors - No sample taken

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-4**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	0-0.5 asphalt
1					0.5-1 feet - silt fill with some stone/gravel
2					
3					
4					1-4 feet - red-brown clay; stiff
5					
6					
7					
8					4-8 feet - red-brown clay; stiff/tight
9					
10					
11					
12					8-12 feet - red-brown clay
					End of Borehole
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors - No sample taken

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-5**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	0-0.5 feet - asphalt
1					0.5-1 feet - sandy, silt fill with some stone/gravel
2					
3					
4					1-4 feet - red-brown clay; stiff
5					
6					
7					
8					4-8 feet - red-brown clay; stiff/tight
					End of Borehole Took soil sample at 8 feet
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors. Collected ample at 8 feet

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-6**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	
1					0-1 feet - sandy, silt fill with some stone/gravel
2					
3					
4					1-4 feet - sandy, clayey silt
5					
6					
7					
8					
9					4-9 feet - red-brown clay; stiff/tight
10					
11					
12					9-12 feet - sandy, silty clay; less stiff
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors. No sample collected

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-7**	Depth to Bedrock:	N/A

Depth (Ft)	Sample NO	Sample TYPE	REC	PID (ppm)	Description
0				0.0	
1					0-1 feet - sandy, silt fill with some stone/gravel
2					
3					1-3 feet - sandy, clayey silt
4					3-4 feet - red-brown clay
5					
6					
7					
8					4-8 feet - red-brown clay
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors. No sample colleted.

Geoprobe
Bore Hole Log

BE3CORP PANAMERICAN
ENVIRONMENT • ENGINEERING • ENERGY
1270 Niagara Street
Buffalo, NY 14213
716.249.6880 be3corp.com

Project:		Niagara Square	
Client:	Norstar	Location:	375 Michigan Avenue, Buffalo, NY
Contractor:	Natures Way	Lat/Long:	Lat: Long:
Date Started:	7/23/2020	Equipment Model:	Geoprobe 54LT and 4ft Sampler
Date Completed:	7/23/2020	Geologist/Technician:	P. Gorton
Operator:	Nate	Ground Water:	
Bore Hole Number:	**BH-8**	Depth to Bedrock:	N/A

Depth (Ft)	Sample		REC	PID	Description
	NO	TYPE		(ppm)	
0				0.0	
1					
2					0-2feet - sandy, clayey, silt
3					
4					
5					2-5.5 feet - red-brown clay
6					5.5-6 feet - silty clayey sand
					Collected Soil sample at 5.5-6 feet
7					
8					6-8 feet - brown clay
9					
10					
11					
12					8-12 - brown clay - soft
13					
14					
15					
16					
17					
18					
19					
20					

Comments: 0 PPM on PID
No visual observation of impacts - no odors. Collected sample at 5.5-6 feet