CITY OF ROCHESTER

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

632 SOUTH PLYMOUTH AVENUE, ROCHESTER, NEW YORK

Prepared for:
CITY OF ROCHESTER DEPARTMENT OF ENVIRONMENTAL SERVICES
City Hall Room 300-B
30 Church Street
Rochester, New York 14614

Bergmann Project No. 6919.22
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1.0 INTRODUCTION

Bergmann Associates, PC (Bergmann) was retained by the City of Rochester to conduct a Phase II Environmental Site Assessment (ESA) at the property identified as the vacant parcel of land (former fire station), owned by the City of Rochester and located at 632 South Plymouth Avenue in the City of Rochester, Monroe County, New York 14608 (the Site). The purpose of this Phase II ESA Report is to document Bergmann's sampling activities conducted at the Site. The general vicinity of the Site is shown on Figure 1 - Site Location Map.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 *Site Description*

The Site is a triangular-shaped vacant parcel of land owned by the City of Rochester. The Site is approximately 0.5 acres, located southeast of South Plymouth Avenue, adjacent to the Kennedy Towers residential tower. The Site was formerly developed as a fire station which was demolished in 2014. The general location of the Site is shown on Figure 1. The Site is defined as tax parcel number 121.610-0002-027.0000000, zoned R3, and located south of South Plymouth Avenue, between Ford Street and Bartlett Street. The subject property is located between residential properties to the north across South Plymouth Avenue; a parking lot for the Kennedy Towers residential tower to the south; a metals manufacturer to the east; and residential properties to the west.

2.2 *Previous Environmental Assessment*

A Phase I Environmental Assessment (ESA) report was prepared by Bergmann (February 2014). The purpose of this report was to identify and document recognized environmental conditions (RECs) at the subject property, in accordance with the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E-1527-13, published November 2013.

The Phase I ESA report identified the following RECs for the Site:

1. Former Auto Repair. According to Historic Sanborn® Fire Insurance Maps, the property was formerly used as an auto repair shop and a gasoline tank was present. The material threat of release of petroleum and/or other hazardous materials associated with automobile repair to the subsurface at the subject property is considered a REC.
2. Potential Underground Storage Tanks. According to Historic Sanborn® Fire Insurance Maps, the property formerly contained at least one gasoline tank. According to the City of Rochester Building Permits list, a fuel oil tank test was recorded for the property. During the December 5, 2013 site visit, a suspected fill port was observed adjacent to a concrete block column on the southwestern corner of the building. The material threat of release of petroleum to the subsurface at the subject property from potential underground storage tanks is considered a REC.
3. Former Coal Storage. According to Historic Sanborn® Fire Insurance Maps, the property was formerly used for the storage of coal. A subsurface investigation conducted at the subject property revealed the presence of ash and cinder in the subsurface at the subject property.

The potential impact on the subsurface from coal storage at the subject property is considered a REC.

4. Historic Fill. A subsurface investigation conducted at the subject property by others revealed the presence of historic fill in the subsurface at the subject property. This historic fill material is considered a REC.
5. Possible release of PCB-containing material. During the December 5, 2013 site visit, an empty transformer canister was laying on its side on the ground on the northern side of the building. This canister appeared to have been removed from a transformer pole in the rear of the building. The area surrounding the canister did not appear to be stained, and no odors were detected. The potential spill of PCB-containing oil or other hazardous materials from this canister is considered a REC.
6. Soil Vapor Intrusion. A vapor encroachment survey (VES) was not conducted as part of this Phase I ESA. The potential for soil vapor intrusion into future on-site buildings exists due to the former use of the subject property as a gasoline and service facility and the potential tanks in the subsurface at the subject property. The potential for soil vapor intrusion to exist at the subject property is considered a REC.
7. Adjacent Properties. According to Historic Sanborn® Fire Insurance Maps, adjacent properties were formerly used as gasoline stations and auto repair facilities. The material threat of migration of petroleum through groundwater to the subsurface at the subject property from potential underground storage tanks on adjacent properties is considered a REC.

The Phase II ESA was conducted to investigate the RECs identified in the Phase I ESA.

The former building at the Site was demolished by the City of Rochester between the time of the Phase I ESA and the start of the Phase II ESA. The asphalt parking areas were left in place at the Site.

A copy of the Bergmann Phase I ESA is included in Appendix A – Phase I Environmental Site Assessment.

3.0 GEOPHYSICAL SURVEY

The geophysical ground penetrating radar (GPR) survey was performed by TREC Environmental (TREC) on January 28, 2016 to locate USTs and associated underground piping. This non-destructive inspection geophysical survey was performed to determine the location and depth of a UST and/or provide the location of a former tank vault. Potential locations were marked on-site prior to drilling or excavating operations. Two anomalies were identified in the central portion of the Site. Anomalies were mapped from interpreted locations with depths and plotted to scale. The survey was used to place test pits and soil borings for further investigation.

The TREC geophysical survey report is included in Appendix A – Geophysical Report.

4.0 TEST PIT MONITORING METHODS AND FIELD SOIL SCREENING

A total of 8 test pits were excavated on January 29, 2016 to investigate areas of concern (AOCs) and anomalies identified by the geophysical survey on the Site. Megan Borruso, Environmental Specialist at Bergmann, conducted a visual inspection of each test pit and conducted soil screening of soil

intervals using a photoionization detector (PID). Test pit locations are shown on Figure 2 – Test Pit Location Plan. Test pits were excavated by TREC using a Kubota KX121-3 excavator from surface to a maximum of 12 feet below ground surface (ft bgs). The information below summarizes each test pit location.

TP-1
Test Pit 1 (TP-1) was located in the center of the Site. The location of TP-1 was based on an anomaly from the geophysical survey with GPR and the location of a gasoline tank on historic maps. TP-1 was excavated to approximately 12 ft bgs. A decommissioned sewer line was uncovered during the excavation. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-2
Test Pit 2 (TP-2) was located in the center of the Site. The location of TP-2 was based on the former location of a gasoline tank and an anomaly from the GPR. TP-2 was excavated to approximately 5 ft bgs. A rusted, capped metal pipe was discovered at approximately 3 ft bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-3
Test Pit 3 (TP-3) was located in the northern corner of the Site. The location of TP-3 was based on the former location of an auto repair garage at the Site. TP-3 was excavated to approximately 10 ft bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-4
Test Pit 4 (TP-4) was located in the northern portion of the Site. The location of TP-4 was based on the former location of an auto repair shop, blacksmith shop, and coal storage building at the Site. TP-4 was excavated to approximately 10 ft bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-5
Test Pit 5 (TP-5) was located in the center of the Site. The location of TP-5 was based on the former location of a storage building at the Site. TP-5 was excavated to approximately 10 ft bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-6
Test Pit 6 (TP-6) was located in the eastern portion of the Site. The location of TP-6 was based on the former location of a coal shed, a storage building, and a fire station at the Site. TP-6 was excavated to approximately 12 ft bgs. The excavation contained plastic sheeting which indicated that a possible subsurface investigation or previous excavation occurred at the Site previous to this Phase II ESA. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-7
Test Pit 7 (TP-7) was located in the southern portion of the Site. The location of TP-7 was based on the former location of a fire station building at the Site. TP-7 was excavated to approximately 12 ft

bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

TP-8
Test Pit 8 (TP-8) was located in the southern portion of the Site. The location of TP-8 was based on the former location of a fire station building at the Site and a suspected UST associated with the former fire station. TP-8 was excavated to approximately 12 ft bgs. PID readings were non-detect at this location and visual/olfactory indications of soil contamination were not observed. Groundwater was not encountered in the excavation.

Soil samples were not collected from Test Pits due to non-detect PID readings. Test Pits are shown on Figure 2 – Test Pit Location Plan. Information on soil descriptions and depth intervals is included on each Test Pit Log in Appendix B – Test Pit Logs.

5.0 SOIL BORING METHODS AND FIELD SOIL SCREENING

A total of 5 soil borings were installed on February 1, 2016 to investigate AOCs on the Site, described above. The soil borings, designated as SB-1 through SB-5 were installed to depths of 11 to 13.5 ft bgs across the Site. Each soil boring was installed for environmental data collection and was continuously sampled from the ground surface to the bottom depth or refusal (possible top of bedrock) in 4 ft intervals. A representative portion of each soil sample was collected for headspace field screening for total volatile organic vapors using a PID. The subsurface conditions encountered were recorded on the test boring logs for each soil boring location. The soil borings allowed for collection of soil samples from two sample zones (0-4 ft. and 4-8 ft.).

Megan Borruso, Environmental Specialist at Bergmann, conducted a visual inspection of each soil boring interval and collected one soil sample from each boring based on highest PID reading. Soil borings were installed by TREC using a truck-mounted Geoprobe drill rig from surface to a maximum of 13.5 ft bgs.

Soil samples were analyzed for Environmental Protection Agency (EPA) Method 8260 Volatile Organic Compounds (VOCs), EPA Method 8270 Semi-Volatile Organic Compounds (SVOCs), and EPA Target Analyte List (TAL) Metals. Soil sample results were compared to New York State Department of Environmental Conservation (NYSDEC) commercial restricted use soil cleanup objectives (SCOs), as the future use of the Site will be passive recreational. The following describes results of the soil sampling analysis:

SB-1
Soil Boring 1 (SB-1) was located in the center of the Site. Soil sample results were non-detect for VOCs and SVOCs. The following metals were detected, in parts per million (ppm): Chromium (12.4 ppm), Lead (172 ppm), and Zinc (177 ppm), below the NYSDEC commercial restricted use SCOs of 400 ppm, 1,000 ppm, and 10,000 ppm, respectively.

SB-2
Soil Boring 2 (SB-2) was located in the center of the Site. Soil sample results were non-detect for VOCs and SVOCs. Chromium was detected (10.2 ppm), below the commercial restricted use SCO of 400 ppm.

SB-3
Soil Boring 3 (SB-3) was located in the eastern portion of the Site. Soil sample results were non-detect for VOCs and SVOCs. Chromium was detected (11 ppm), below the commercial restricted use SCO of 400 ppm.

SB-4
Soil Boring 4 (SB-4) was located in southeast corner of the Site. Soil sample results were non-detect for VOCs and SVOCs. Chromium was detected (9.15 ppm), below the commercial restricted use SCO of 400 ppm.

SB-5
Soil Boring (SB-5) was located in the northern corner of the Site. Soil sample results were non-detect for VOCs and SVOCs. Chromium was detected (8.16 ppm), below the commercial restricted use SCO of 400 ppm.

Soil boring locations are shown on Figure 3 – Soil Sample Location Plan. Information on soil descriptions and depth intervals is included on each Soil Boring Log in Appendix C – Soil Boring Logs.

Laboratory analytical data is included in Appendix D – Laboratory Data Report.

6.0 SURFACE SOIL SAMPLING

A total of 3 surface soil samples were collected in AOCs identified in the Phase I ESA. Surface Soil Sample 1 (SS-1) was analyzed in accordance with EPA 8260, EPA 8270, TAL Metals, EPA 8082 Polychlorinated Biphenyls (PCBs) and EPA 8080 Pesticides. Surface Soil Samples 2 and 3 (SS-2 and SS-3) were analyzed in accordance with EPA 8082 PCBs. The following describes results of the soil sampling analysis:

SS-1
SS-1 was located on the north side of a former transformer at the Site. Soil sample results were non-detect for PCBs.

SS-2
SS-2 was located on the south side of a former transformer at the Site. Soil sample results were non-detect for PCBs.

SS-3
SS-3 was located in the center of the Site, where the future PLEX Playground is proposed. Soil sample results were non-detect for VOCs, SVOCs, PCBs, and Pesticides. Metals were detected in SS-3, below commercial restricted use SCOs.

Surface soil sample locations are shown on Figure 3 – Soil Sample Location Plan.

Laboratory analytical data is included in Appendix D – Laboratory Data Report.

7.0 SUMMARY AND CONCLUSION

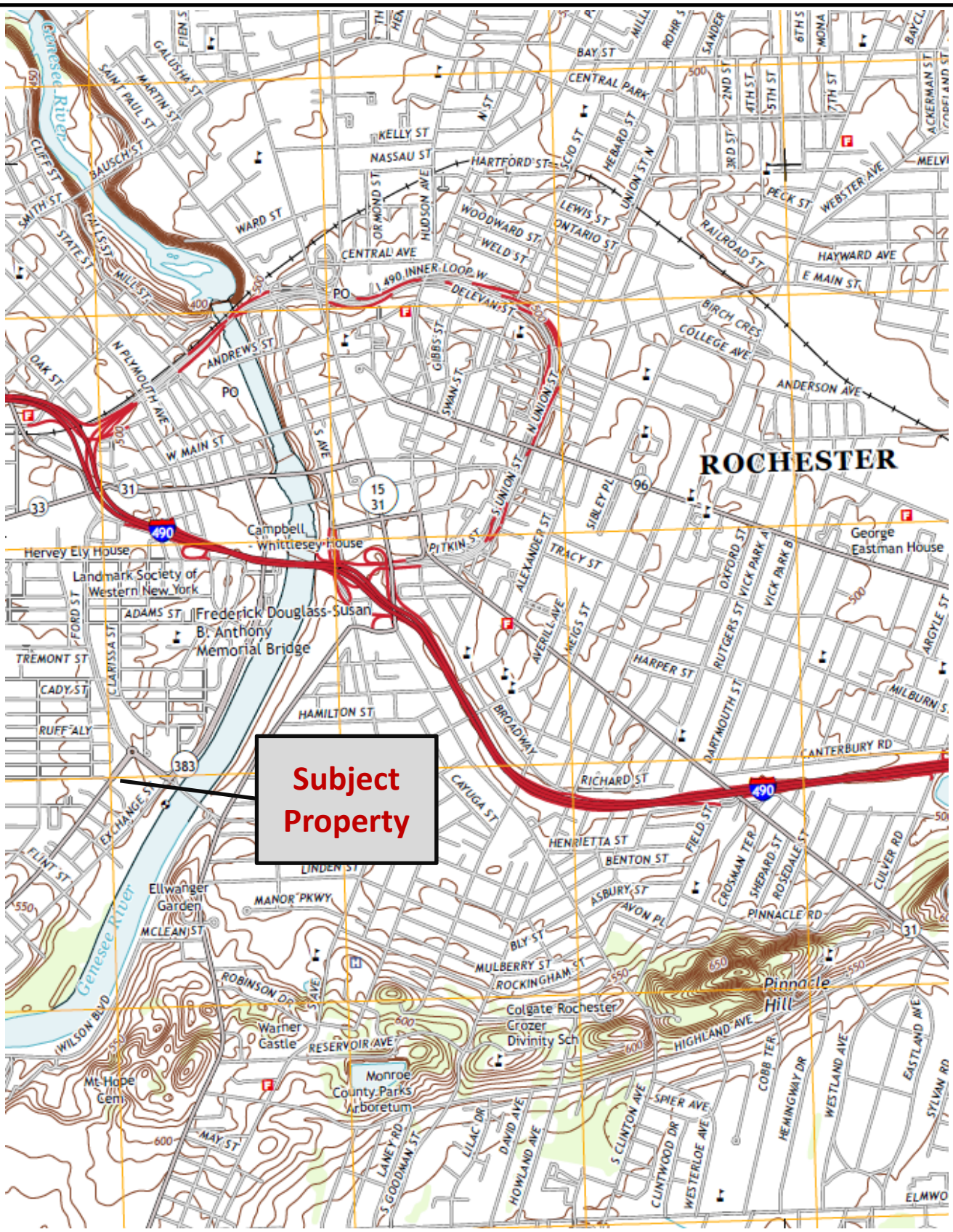
The scope of work for this Phase II ESA included the installation of 8 test pits, the installation of 5 soil borings with the collection of 5 soil samples, and the collection of 3 surface soil samples from locations across the Site based on AOCs identified in the Phase I ESA.

Based on information obtained in the Phase II ESA, metals, PCBs, VOCs and SVOCs were below restricted commercial SCOs, selected for the intended use of the Site as passive recreational.

8.0 RECOMMENDATION

The intended future use of the Site is passive recreational. Site soils for passive recreational use must meet NYSDEC restricted commercial SCOs. All soil sample results from this Phase II ESA were below restricted commercial SCOs and therefore, remediation is not required at the Site, as long as the future use remains passive recreational.

FIGURES



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632 South Plymouth Avenue Phase II ESA
Site Location Map

USGS 7.5 Minute Series, Rochester East, NY Quadrangle, 2013

Figure 1

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632 South Plymouth Avenue - Phase II ESA

Figure 2 - Test Pit Location Plan

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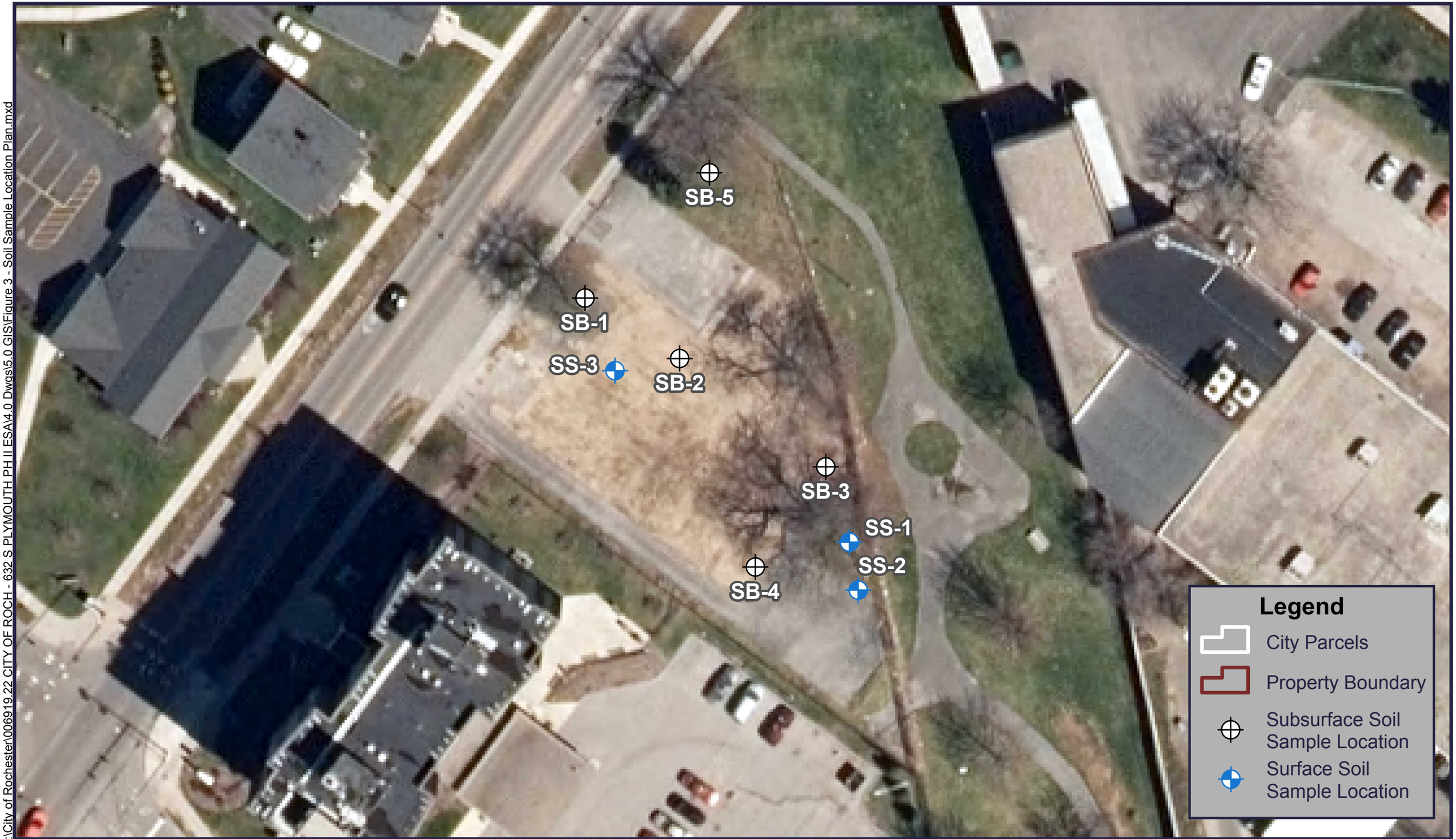
I:\City of Rochester\006919.22 CITY OF ROCH - 632 S PLYMOUTH PH II ESA\4.0 Dwgs\5.0 GIS\Figure 2 - Test Pit Location Plan.mxd



N

0 25 50 100

Feet

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632 South Plymouth Avenue - Phase II ESA

Figure 3 - Soil Sample Location Plan

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I:\City of Rochester\006919.22 CITY OF ROCH - 632 S PLYMOUTH PH II ESA\4.0 Dwgs\5.0 GIS\Figure 3 - Soil Sample Location Plan.mxd

APPENDIX A

GEOPHYSICAL REPORT

TREC Environmental Inc.

Technician: Jim Agar

Date: 1-28-16

Site Address: 632 S. Plymouth St.,Rochester

Contact Person: Megan Borruso

Scope of Work: Scan area for potential underground storage tanks and possible utilities.

Type of Service:

☐Fault Detection ☒Utility Location/GPR

☐Infrastructure Assessment ☐Utility Mapping

Type of Equipment Used:

☒Mala Easy Locator HDR ☒SPX RD 7000

Marking Used:

☒Paint ☐Flags ☐Chalk ☒Updated Existing Maps ☐Other

Instructions from Onsite Contact: Scan area as discussed onsite.

Notes: Two anomalies were located on the site. The two anomalies were highlighted with paint. Also, two of the three lines in the electric vault in the southeast corner could not be located. The three electric lines leaving the vault towards the building had been removed. The Fiber Optic line in the northwest corner was said to leave the vault and run along the fence to the rear of the demolished building. It was stated by the Fiber Tech representative that the line was no longer in service.

Information Relayed on site:

☒Verbal ☐GPR Photos ☐Digital Photos ☐Hand drawn Map

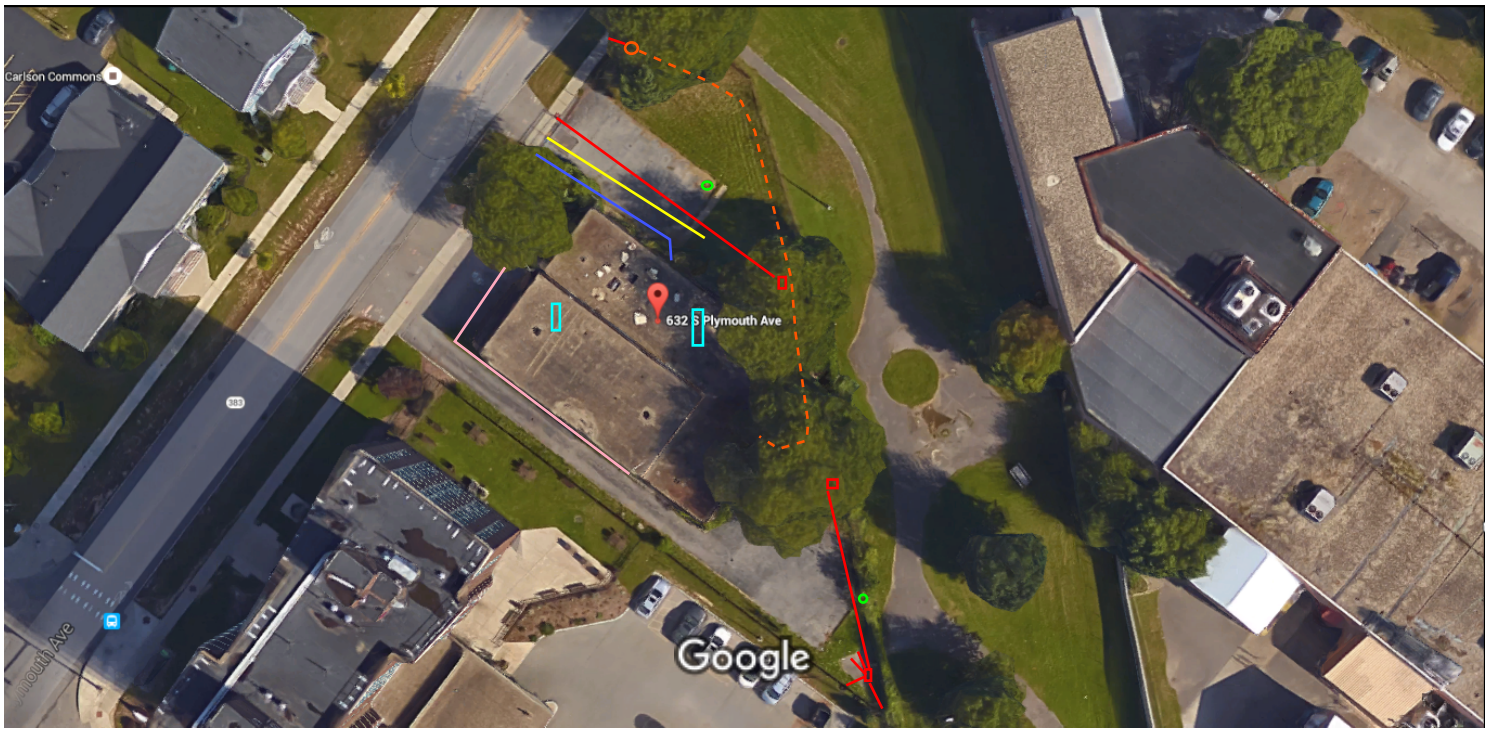
Reporting Options:

☒Letter Report

☐Comprehensive Report

TREC will guarantee the accuracy of utility markings only when subsurface utility location methods are used which meet the ASCE's *Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data CI/ASCE 38-02,* Quality Level A. This process exposes subsurface utility systems to confirm location, size and identity.

Google Maps 632 S Plymouth Ave



Imagery ©2016 Google, Map data ©2016 Google 20 ft

Legend:

Electric	Unknown Utility
Gas	Anomalies
Water	Electric Box
Fiber Optic Line as told by Fiber Tech Representative. Line was also said to be out of service.	Storm Sewer

APPENDIX B

TEST PIT LOGS

Environmental Test Pit Log

TP-1

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	1 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Near former gasoline tank location	Brown medium-coarse Sand, some red brick, little concrete, trace plastic.
2	2	NA	0.0	NA		Same as above (SAA).
4	4	NA	0.0	NA		SAA
6	6	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 6'
1/29/2016	0845	6'	NA	

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Environmental Test Pit Log

TP-2

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	2 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Near 3' anomaly in center of Site.	Brown medium-coarse Sand, some red brick, little concrete, trace plastic.
2	2	NA	0.0	NA		SAA
4	4	NA	0.0	NA		Pipe encountered at 3' bgs. Rusted, metal, capped. Brown medium-coarse Sand, some black ash.
5	5	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 5'
1/29/2016	0915	5'	NA	

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Environmental Test Pit Log

TP-3

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	3 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Near tree along South Plymouth Avenue.	Brown fine to coarse Sand, some gravel.
2	2	NA	0.0	NA		Fill - brick, concrete, wood, ceramic tile, glass.
4	4	NA	0.0	NA		Ash.
6	6	NA	0.0	NA		Light brown fine to coarse Sand.
8	8	NA	0.0	NA		Light grey Silt, some clay.
10	10	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 10'
1/29/2016	0940	10'	NA	

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Environmental Test Pit Log

TP-4

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	4 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Near end of driveway.	Brown fine to coarse Sand, some gravel.
2	2	NA	0.0	NA		Fill - brick, concrete, wood, ceramic tile, glass.
4	4	NA	0.0	NA		Ash.
6	6	NA	0.0	NA		Light brown fine to coarse Sand.
8	8	NA	0.0	NA		Light grey Silt, some clay.
10	10	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 10'
1/29/2016	1005	10'	NA	

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Environmental Test Pit Log

TP-5

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	5 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Diagonally south from TP-2.	Brown fine to coarse Sand, some gravel.
2	2	NA	0.0	NA		Fill - brick, concrete, wood, ceramic tile, glass.
4	4	NA	0.0	NA		Ash.
6	6	NA	0.0	NA		Light brown fine to coarse Sand.
8	8	NA	0.0	NA		Light grey Silt, some clay.
10	10	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 10'
1/29/2016	1038	10'	NA	

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Environmental Test Pit Log

TP-6

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	6 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	Next to parking lot.	Brown fine to coarse Sand, some gravel.
2	2	NA	0.0	NA		Fill - brick, concrete, wood, ceramic tile, glass.
4	4	NA	0.0	NA		Poly sheeting layer from previous investigation.
6	6	NA	0.0	NA		Brown Sand, some gravel, some brick, little wood, trace concrete, trace ceramic tile.
8	8	NA	0.0	NA		Light grey Silt, some clay.
10	10	NA	0.0	NA		SAA
12	12	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 12'
1/29/2016	1110	12'	NA	

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Environmental Test Pit Log

TP-7

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	7 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	In grass in central portion of Site.	Brown Sand, some gravel, little brick, trace rock.
2	2	NA	0.0	NA		Brown/black Sand, some gravel.
4	4	NA	0.0	NA		Brown/black Sand, some gravel, little rock, trace silt.
6	6	NA	0.0	NA		SAA
8	8	NA	0.0	NA		SAA
10	10	NA	0.0	NA		SAA
12	10	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 12'
1/29/2016	1130	12'	NA	

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Environmental Test Pit Log

TP-8

Project:	632 South Plymouth Avenue	Project No:	6919.22
Client:	City of Rochester	Sheet No:	8 of 8
Contractor	TREC Environmental	Location:	See Plan

Item	Casing	Drive Sampler	Core Barrel	Excavation Equipment and Procedures		
Type:	NA	NA	NA	Excavator: Kubota KX121-3	Elevation:	Unknown
Inside Diameter (IN):	NA	NA	NA	Dig Radius: 18'	Datum:	NA
Hemmer Weight (LB):	NA	NA	NA	Dig Depth: 11' 6"	Start:	1/29/2016
Hammer Fall (IN):	NA	NA	NA		Finish	1/29/2016
Other:	NA	NA	NA		Operator:	Kurt Ballerstein- TREC
					Bergmann Rep:	Megan Borruso - BA

Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number	Notes	Visual Classification and Remarks
0	0	NA	0.0	NA	West of TP-7.	Brown Sand, some gravel, little brick, trace rock.
2	2	NA	0.0	NA		Brown/black Sand, some gravel.
4	4	NA	0.0	NA		Brown/black Sand, some gravel, little rock, trace silt.
6	6	NA	0.0	NA		SAA
8	8	NA	0.0	NA		SAA
10	10	NA	0.0	NA		SAA
12	12	NA	0.0	NA		SAA

Groundwater Data				Summary
	Depth			Test Pit Dimensions (L x W x H):
Date	Time	Bottom Of Hole	Water	7' x 3' x 12'
1/29/2016	1200	12'	NA	

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APPENDIX C

SOIL BORING LOGS

SOIL BORING LOG

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BORING/WELL NUMBER: **SB-1**

PROJECT: 632 South Plymouth Avenue Phase II ESA
Project No: 6919.22
Page No. 1 of 5
Start Date: 2/1/2016 Finish Date: 2/1/2016
Top of Well:
Boring No: SB-1
Driller: TREC Environmental
Boring Location: See Plan
Inspector: Megan Borruso
Drilling Method: Direct Push, Clear PVC Sleeve
Geographic Location (Degrees, Minutes, Seconds): 77° 37' 06.72" W 43° 08' 34.60" N Elev. 515 AMSL
Weather Conditions: Cloudy and breezy, 30°

DEPTH	BLOWS ON SAMPLER				SAMPLE					DESCRIPTION	VOC Screening ppm	NOTES
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
							0-4			Brown Sand, some gravel, little red brick, trace asphalt.	0.5 ppm	Moist
2												
4												
							4-8			Brown Sand, some gravel.	0.3 ppm	Dry
										Red Brick, trace gravel.		Dry
6												
										Brown Sand, some gravel, little sand.		Dry
8												
							8-12			Red Brick, some brown gravel.		Dry
										Brown Sand, some silt, little gravel, trace concrete.	0.2 ppm	Dry
10												
12												
							12-16			Brown Sand, some gravel.	1.0 ppm	
										Brown Sand, some gravel, little concrete.		Refusal at 13.5 feet
14												
16												
18												
20												
22												
24												
26												
28												
30												

Notes: **0900: Sample SB-1 collected from 12-13.5 interval - highest PID reading.**

Temporary groundwater monitoring well installed at 13.5 ft bgs.

SOIL BORING LOG

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BORING/WELL NUMBER: **SB-2**

PROJECT: 632 South Plymouth Avenue Phase II ESA
Project No: 6919.22
Page No. 2 of 5
Start Date: 2/1/2016 Finish Date: 2/1/2016
Top of Well:
Boring No: SB-2
Driller: TREC Environmental
Boring Location: See Plan
Inspector: Megan Borruso
Drilling Method: Direct Push, Clear PVC Sleeve
Geographic Location (Degrees, Minutes, Seconds): 77° 37' 06.72" W 43° 08' 34.60" N Elev. 515 AMSL
Weather Conditions: Cloudy and breezy, 30°

DEPTH	BLOWS ON SAMPLER				SAMPLE					DESCRIPTION	VOC Screening ppm	NOTES
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
							0-4			Brown Sand, some gravel.	0.5 ppm	Moist
2												
4												
							4-8			Dark brown Sand, some red brick, little gravel.	0.3 ppm	Dry
										Light brown Sand, some gravel, little silt.		Dry
6												
8												
							8-12			Light brown Sand, some silt.	1.1 ppm	Dry
10												Refusal at 11.0 ft
12												
							12-16					
14												
16												
18												
20												
22												
24												
26												
28												
30												

Notes: **0948: Sample SB-2 collected from 8-11 interval - highest PID reading.**

Temporary groundwater monitoring well installed at 11.0 ft bgs.

SOIL BORING LOG

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BORING/WELL NUMBER: **SB-3**

PROJECT: 632 South Plymouth Avenue Phase II ESA
Project No: 6919.22
Page No. 3 of 5
Start Date: 2/1/2016 Finish Date: 2/1/2016
Top of Well:
Boring No: SB-3
Driller: TREC Environmental
Boring Location: See Plan
Inspector: Megan Borruso
Drilling Method: Direct Push, Clear PVC Sleeve
Geographic Location (Degrees, Minutes, Seconds): 77° 37' 06.72" W 43° 08' 34.60" N Elev. 515 AMSL
Weather Conditions: Cloudy and breezy, 30°

DEPTH	BLOWS ON SAMPLER				SAMPLE					DESCRIPTION	VOC Screening ppm	NOTES
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
							0-4			Asphalt, sub base.	0.9 ppm	Dry
2												
4												
							4-8			Brown Sand, some gravel, little red brick. Dark brown Sand, some gravel. Light brown Sand, some silt.	0.4 ppm	Dry
6												
8												
							8-12			Brown Gravel, some red brick. Brown Sand, some gravel. Brown Sand, some silt.	0.5 ppm	Dry Refusal at 11.2 ft
10												
12												
							12-16					
14												
16												
18												
20												
22												
24												
26												
28												
30												

Notes: **1035: Sample SB-3 collected from 8-12 interval - highest PID reading.**

Temporary groundwater monitoring well installed at 11.2 ft bgs.

SOIL BORING LOG

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BORING/WELL NUMBER: **SB-4**

PROJECT: 632 South Plymouth Avenue Phase II ESA
Project No: 6919.22
Page No. 4 of 5
Start Date: 2/1/2016 Finish Date: 2/1/2016
Top of Well:
Boring No: SB-4
Driller: TREC Environmental
Boring Location: See Plan
Inspector: Megan Borruso
Drilling Method: Direct Push, Clear PVC Sleeve
Geographic Location (Degrees, Minutes, Seconds): 77° 37' 06.72" W 43° 08' 34.60" N Elev. 515 AMSL
Weather Conditions: Cloudy and breezy, 30°

DEPTH	BLOWS ON SAMPLER				SAMPLE					DESCRIPTION	VOC Screening ppm	NOTES
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
							0-4			Brown Sand, some gravel, trace wood.	0.3 ppm	Dry
2												
4												
							4-8			Dark brown Sand, some gravel. Light brown Sand, some gravel. Red brick.	0.4 ppm	Dry
6										Dark brown Sand, some gravel, little silt.		
8												
							8-12			Brown Gravel, some red brick.	0.5 ppm	Dry
10										Brown Sand, some gravel, little silt.		
12												Refusal at 11.5 ft
							12-16					
14												
16												
18												
20												
22												
24												
26												
28												
30												

Notes: **1136: Sample SB-4 collected from 8-12 interval - highest PID reading.**

Temporary groundwater monitoring well installed at 11.5 ft bgs.

SOIL BORING LOG

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BORING/WELL NUMBER: **SB-5**

PROJECT: 632 South Plymouth Avenue Phase II ESA
Project No: 6919.22
Page No. 5 of 5
Start Date: 2/1/2016 Finish Date: 2/1/2016
Top of Well:
Boring No: SB-5
Driller: TREC Environmental
Boring Location: See Plan
Inspector: Megan Borruso
Drilling Method: Direct Push, Clear PVC Sleeve
Geographic Location (Degrees, Minutes, Seconds): 77° 37' 06.72" W 43° 08' 34.60" N Elev. 515 AMSL
Weather Conditions: Cloudy and breezy, 30°

DEPTH	BLOWS ON SAMPLER				SAMPLE					DESCRIPTION	VOC Screening ppm	NOTES
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
							0-4			Brown Sand, some gravel, trace silt.	0.3 ppm	Dry
2												
4												
							4-8			Brown Sand, some red brick, little concrete.	0.2 ppm	Dry
6										Brown Sand.		
8												
							8-12			Brown Sand, some gravel, little silt.	0.2 ppm	Dry
10												
12												
							12-16			Brown Sand, some gravel, little silt.	0.4 ppm	
14												Refusal at 13.5 ft
16												
18												
20												
22												
24												
26												
28												
30												

Notes: **1210: Sample SB-5 collected from 12-13.5 interval - highest PID reading.**

Temporary groundwater monitoring well installed at 13.5 ft bgs.

APPENDIX D

LABORATORY DATA REPORT

PARADIGM

Analytical Report For

Bergmann Associates

For Lab Project ID

160439

Referencing

632 South Plymouth

Prepared

Tuesday, February 09, 2016

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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-1 (12-13.5)
Lab Sample ID: 160439-01 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0807**	mg/Kg		2/4/2016 18:33

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**7660**	mg/Kg		2/5/2016 12:46
Antimony	< 3.46	mg/Kg		2/5/2016 12:46
Arsenic	**7.14**	mg/Kg		2/5/2016 12:46
Barium	**134**	mg/Kg		2/5/2016 12:46
Beryllium	**0.360**	mg/Kg		2/5/2016 12:46
Cadmium	< 0.289	mg/Kg		2/5/2016 12:46
Calcium	**33800**	mg/Kg		2/5/2016 16:42
Chromium	**12.4**	mg/Kg		2/5/2016 12:46
Cobalt	**4.99**	mg/Kg		2/5/2016 12:46
Copper	**20.7**	mg/Kg		2/5/2016 12:46
Iron	**15800**	mg/Kg		2/5/2016 12:46
Lead	**172**	mg/Kg		2/5/2016 12:46
Magnesium	**10900**	mg/Kg		2/5/2016 12:46
Manganese	**313**	mg/Kg		2/5/2016 12:46
Nickel	**12.8**	mg/Kg		2/5/2016 12:46
Potassium	**1430**	mg/Kg		2/5/2016 12:46
Selenium	< 0.577	mg/Kg		2/5/2016 12:46
Silver	< 0.577	mg/Kg		2/5/2016 12:46
Sodium	**686**	mg/Kg		2/5/2016 12:46
Thallium	< 1.44	mg/Kg		2/5/2016 12:46
Vanadium	**19.4**	mg/Kg		2/5/2016 12:46
Zinc	**177**	mg/Kg		2/5/2016 12:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-1 (12-13.5)
Lab Sample ID: 160439-01 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 323	ug/Kg		2/5/2016 20:54
1,2,4,5-Tetrachlorobenzene	< 323	ug/Kg		2/5/2016 20:54
1,2,4-Trichlorobenzene	< 323	ug/Kg		2/5/2016 20:54
1,2-Dichlorobenzene	< 323	ug/Kg		2/5/2016 20:54
1,3-Dichlorobenzene	< 323	ug/Kg		2/5/2016 20:54
1,4-Dichlorobenzene	< 323	ug/Kg		2/5/2016 20:54
2,4-Dinitrotoluene	< 323	ug/Kg		2/5/2016 20:54
2,6-Dinitrotoluene	< 323	ug/Kg		2/5/2016 20:54
2-Chloronaphthalene	< 323	ug/Kg		2/5/2016 20:54
2-Methylnapthalene	< 323	ug/Kg		2/5/2016 20:54
2-Nitroaniline	< 647	ug/Kg		2/5/2016 20:54
3,3'-Dichlorobenzidine	< 323	ug/Kg		2/5/2016 20:54
3-Nitroaniline	< 647	ug/Kg		2/5/2016 20:54
4-Bromophenyl phenyl ether	< 323	ug/Kg		2/5/2016 20:54
4-Chloroaniline	< 323	ug/Kg		2/5/2016 20:54
4-Chlorophenyl phenyl ether	< 323	ug/Kg		2/5/2016 20:54
4-Nitroaniline	< 647	ug/Kg		2/5/2016 20:54
Acenaphthene	< 323	ug/Kg		2/5/2016 20:54
Acenaphthylene	< 323	ug/Kg		2/5/2016 20:54
Acetophenone	< 323	ug/Kg		2/5/2016 20:54
Anthracene	< 323	ug/Kg		2/5/2016 20:54
Atrazine	< 323	ug/Kg		2/5/2016 20:54
Benzaldehyde	< 323	ug/Kg		2/5/2016 20:54
Benzo (a) anthracene	< 323	ug/Kg		2/5/2016 20:54
Benzo (a) pyrene	< 323	ug/Kg		2/5/2016 20:54
Benzo (b) fluoranthene	< 323	ug/Kg		2/5/2016 20:54

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-1 (12-13.5)		
Lab Sample ID:	160439-01	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Benzo (g,h,i) perylene	< 323	ug/Kg	2/5/2016 20:54
Benzo (k) fluoranthene	< 323	ug/Kg	2/5/2016 20:54
Bis (2-chloroethoxy) methane	< 323	ug/Kg	2/5/2016 20:54
Bis (2-chloroethyl) ether	< 323	ug/Kg	2/5/2016 20:54
Bis (2-chloroisopropyl) ether	< 323	ug/Kg	2/5/2016 20:54
Bis (2-ethylhexyl) phthalate	< 323	ug/Kg	2/5/2016 20:54
Butylbenzylphthalate	< 323	ug/Kg	2/5/2016 20:54
Caprolactam	< 323	ug/Kg	2/5/2016 20:54
Carbazole	< 323	ug/Kg	2/5/2016 20:54
Chrysene	< 323	ug/Kg	2/5/2016 20:54
Dibenz (a,h) anthracene	< 323	ug/Kg	2/5/2016 20:54
Dibenzofuran	< 323	ug/Kg	2/5/2016 20:54
Diethyl phthalate	< 323	ug/Kg	2/5/2016 20:54
Dimethyl phthalate	< 647	ug/Kg	2/5/2016 20:54
Di-n-butyl phthalate	< 323	ug/Kg	2/5/2016 20:54
Di-n-octylphthalate	< 323	ug/Kg	2/5/2016 20:54
Fluoranthene	< 323	ug/Kg	2/5/2016 20:54
Fluorene	< 323	ug/Kg	2/5/2016 20:54
Hexachlorobenzene	< 323	ug/Kg	2/5/2016 20:54
Hexachlorobutadiene	< 323	ug/Kg	2/5/2016 20:54
Hexachlorocyclopentadiene	< 323	ug/Kg	2/5/2016 20:54
Hexachloroethane	< 323	ug/Kg	2/5/2016 20:54
Indeno (1,2,3-cd) pyrene	< 323	ug/Kg	2/5/2016 20:54
Isophorone	< 323	ug/Kg	2/5/2016 20:54
Naphthalene	< 323	ug/Kg	2/5/2016 20:54
Nitrobenzene	< 323	ug/Kg	2/5/2016 20:54
N-Nitroso-di-n-propylamine	< 323	ug/Kg	2/5/2016 20:54
N-Nitrosodiphenylamine	< 323	ug/Kg	2/5/2016 20:54
Phenanthrene	< 323	ug/Kg	2/5/2016 20:54
Pyrene	< 323	ug/Kg	2/5/2016 20:54

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-1 (12-13.5)
Lab Sample ID: 160439-01 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**48.5**	22 - 96.1		2/5/2016 20:54
Nitrobenzene-d5	**43.5**	11.6 - 83.3		2/5/2016 20:54
Terphenyl-d14	**72.6**	60.4 - 114		2/5/2016 20:54

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09990.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 6.56	ug/Kg		2/3/2016 19:20
1,1,2,2-Tetrachloroethane	< 6.56	ug/Kg		2/3/2016 19:20
1,1,2-Trichloroethane	< 6.56	ug/Kg		2/3/2016 19:20
1,1-Dichloroethane	< 6.56	ug/Kg		2/3/2016 19:20
1,1-Dichloroethene	< 6.56	ug/Kg		2/3/2016 19:20
1,2,3-Trichlorobenzene	< 16.4	ug/Kg		2/3/2016 19:20
1,2,4-Trichlorobenzene	< 16.4	ug/Kg		2/3/2016 19:20
1,2-Dibromo-3-Chloropropane	< 32.8	ug/Kg		2/3/2016 19:20
1,2-Dibromoethane	< 6.56	ug/Kg		2/3/2016 19:20
1,2-Dichlorobenzene	< 6.56	ug/Kg		2/3/2016 19:20
1,2-Dichloroethane	< 6.56	ug/Kg		2/3/2016 19:20
1,2-Dichloropropane	< 6.56	ug/Kg		2/3/2016 19:20
1,3-Dichlorobenzene	< 6.56	ug/Kg		2/3/2016 19:20
1,4-Dichlorobenzene	< 6.56	ug/Kg		2/3/2016 19:20
1,4-dioxane	< 65.6	ug/Kg		2/3/2016 19:20
2-Butanone	< 32.8	ug/Kg		2/3/2016 19:20
2-Hexanone	< 16.4	ug/Kg		2/3/2016 19:20
4-Methyl-2-pentanone	< 16.4	ug/Kg		2/3/2016 19:20
Acetone	< 32.8	ug/Kg		2/3/2016 19:20
Benzene	< 6.56	ug/Kg		2/3/2016 19:20
Bromochloromethane	< 16.4	ug/Kg		2/3/2016 19:20
Bromodichloromethane	< 6.56	ug/Kg		2/3/2016 19:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-1 (12-13.5)		
Lab Sample ID:	160439-01	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Bromoform	< 16.4	ug/Kg	2/3/2016	19:20
Bromomethane	< 6.56	ug/Kg	2/3/2016	19:20
Carbon disulfide	< 6.56	ug/Kg	2/3/2016	19:20
Carbon Tetrachloride	< 6.56	ug/Kg	2/3/2016	19:20
Chlorobenzene	< 6.56	ug/Kg	2/3/2016	19:20
Chloroethane	< 6.56	ug/Kg	2/3/2016	19:20
Chloroform	< 6.56	ug/Kg	2/3/2016	19:20
Chloromethane	< 6.56	ug/Kg	2/3/2016	19:20
cis-1,2-Dichloroethene	< 6.56	ug/Kg	2/3/2016	19:20
cis-1,3-Dichloropropene	< 6.56	ug/Kg	2/3/2016	19:20
Cyclohexane	< 32.8	ug/Kg	2/3/2016	19:20
Dibromochloromethane	< 6.56	ug/Kg	2/3/2016	19:20
Dichlorodifluoromethane	< 6.56	ug/Kg	2/3/2016	19:20
Ethylbenzene	< 6.56	ug/Kg	2/3/2016	19:20
Freon 113	< 6.56	ug/Kg	2/3/2016	19:20
Isopropylbenzene	< 6.56	ug/Kg	2/3/2016	19:20
m,p-Xylene	< 6.56	ug/Kg	2/3/2016	19:20
Methyl acetate	< 6.56	ug/Kg	2/3/2016	19:20
Methyl tert-butyl Ether	< 6.56	ug/Kg	2/3/2016	19:20
Methylcyclohexane	< 6.56	ug/Kg	2/3/2016	19:20
Methylene chloride	< 16.4	ug/Kg	2/3/2016	19:20
o-Xylene	< 6.56	ug/Kg	2/3/2016	19:20
Styrene	< 16.4	ug/Kg	2/3/2016	19:20
Tetrachloroethene	< 6.56	ug/Kg	2/3/2016	19:20
Toluene	< 6.56	ug/Kg	2/3/2016	19:20
trans-1,2-Dichloroethene	< 6.56	ug/Kg	2/3/2016	19:20
trans-1,3-Dichloropropene	< 6.56	ug/Kg	2/3/2016	19:20
Trichloroethene	< 6.56	ug/Kg	2/3/2016	19:20
Trichlorofluoromethane	< 6.56	ug/Kg	2/3/2016	19:20
Vinyl chloride	< 6.56	ug/Kg	2/3/2016	19:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-1 (12-13.5)

Lab Sample ID: 160439-01 **Date Sampled:** 2/1/2016

Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**107**	83 - 126		2/3/2016	19:20
4-Bromofluorobenzene	**92.1**	80.8 - 115		2/3/2016	19:20
Pentafluorobenzene	**94.2**	90.6 - 111		2/3/2016	19:20
Toluene-D8	**95.6**	89.2 - 109		2/3/2016	19:20

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

Data File: x29397.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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-2 (8-11)
Lab Sample ID: 160439-02 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0097**	mg/Kg		2/4/2016 18:37

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**7540**	mg/Kg		2/5/2016 12:50
Antimony	< 3.30	mg/Kg		2/5/2016 12:50
Arsenic	**3.94**	mg/Kg		2/5/2016 12:50
Barium	**38.2**	mg/Kg		2/5/2016 12:50
Beryllium	**0.332**	mg/Kg		2/5/2016 12:50
Cadmium	< 0.275	mg/Kg		2/5/2016 12:50
Calcium	**11000**	mg/Kg		2/5/2016 12:50
Chromium	**10.2**	mg/Kg		2/5/2016 12:50
Cobalt	**5.68**	mg/Kg		2/5/2016 12:50
Copper	**12.1**	mg/Kg		2/5/2016 12:50
Iron	**13200**	mg/Kg		2/5/2016 12:50
Lead	**9.57**	mg/Kg		2/5/2016 12:50
Magnesium	**4170**	mg/Kg		2/5/2016 12:50
Manganese	**246**	mg/Kg		2/5/2016 12:50
Nickel	**10.5**	mg/Kg		2/5/2016 12:50
Potassium	**1000**	mg/Kg		2/5/2016 12:50
Selenium	< 0.549	mg/Kg		2/5/2016 16:47
Silver	< 0.549	mg/Kg		2/5/2016 12:50
Sodium	< 137	mg/Kg		2/5/2016 12:50
Thallium	< 1.37	mg/Kg		2/5/2016 12:50
Vanadium	**15.8**	mg/Kg		2/5/2016 12:50
Zinc	**38.2**	mg/Kg		2/5/2016 12:50

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-2 (8-11)
Lab Sample ID: 160439-02 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 338	ug/Kg		2/5/2016 21:23
1,2,4,5-Tetrachlorobenzene	< 338	ug/Kg		2/5/2016 21:23
1,2,4-Trichlorobenzene	< 338	ug/Kg		2/5/2016 21:23
1,2-Dichlorobenzene	< 338	ug/Kg		2/5/2016 21:23
1,3-Dichlorobenzene	< 338	ug/Kg		2/5/2016 21:23
1,4-Dichlorobenzene	< 338	ug/Kg		2/5/2016 21:23
2,4-Dinitrotoluene	< 338	ug/Kg		2/5/2016 21:23
2,6-Dinitrotoluene	< 338	ug/Kg		2/5/2016 21:23
2-Chloronaphthalene	< 338	ug/Kg		2/5/2016 21:23
2-Methylnapthalene	< 338	ug/Kg		2/5/2016 21:23
2-Nitroaniline	< 676	ug/Kg		2/5/2016 21:23
3,3'-Dichlorobenzidine	< 338	ug/Kg		2/5/2016 21:23
3-Nitroaniline	< 676	ug/Kg		2/5/2016 21:23
4-Bromophenyl phenyl ether	< 338	ug/Kg		2/5/2016 21:23
4-Chloroaniline	< 338	ug/Kg		2/5/2016 21:23
4-Chlorophenyl phenyl ether	< 338	ug/Kg		2/5/2016 21:23
4-Nitroaniline	< 676	ug/Kg		2/5/2016 21:23
Acenaphthene	< 338	ug/Kg		2/5/2016 21:23
Acenaphthylene	< 338	ug/Kg		2/5/2016 21:23
Acetophenone	< 338	ug/Kg		2/5/2016 21:23
Anthracene	< 338	ug/Kg		2/5/2016 21:23
Atrazine	< 338	ug/Kg		2/5/2016 21:23
Benzaldehyde	< 338	ug/Kg		2/5/2016 21:23
Benzo (a) anthracene	< 338	ug/Kg		2/5/2016 21:23
Benzo (a) pyrene	< 338	ug/Kg		2/5/2016 21:23
Benzo (b) fluoranthene	< 338	ug/Kg		2/5/2016 21:23

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-2 (8-11)
Lab Sample ID: 160439-02 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Benzo (g,h,i) perylene	< 338	ug/Kg	2/5/2016	21:23
Benzo (k) fluoranthene	< 338	ug/Kg	2/5/2016	21:23
Bis (2-chloroethoxy) methane	< 338	ug/Kg	2/5/2016	21:23
Bis (2-chloroethyl) ether	< 338	ug/Kg	2/5/2016	21:23
Bis (2-chloroisopropyl) ether	< 338	ug/Kg	2/5/2016	21:23
Bis (2-ethylhexyl) phthalate	< 338	ug/Kg	2/5/2016	21:23
Butylbenzylphthalate	< 338	ug/Kg	2/5/2016	21:23
Caprolactam	< 338	ug/Kg	2/5/2016	21:23
Carbazole	< 338	ug/Kg	2/5/2016	21:23
Chrysene	< 338	ug/Kg	2/5/2016	21:23
Dibenz (a,h) anthracene	< 338	ug/Kg	2/5/2016	21:23
Dibenzofuran	< 338	ug/Kg	2/5/2016	21:23
Diethyl phthalate	< 338	ug/Kg	2/5/2016	21:23
Dimethyl phthalate	< 676	ug/Kg	2/5/2016	21:23
Di-n-butyl phthalate	< 338	ug/Kg	2/5/2016	21:23
Di-n-octylphthalate	< 338	ug/Kg	2/5/2016	21:23
Fluoranthene	< 338	ug/Kg	2/5/2016	21:23
Fluorene	< 338	ug/Kg	2/5/2016	21:23
Hexachlorobenzene	< 338	ug/Kg	2/5/2016	21:23
Hexachlorobutadiene	< 338	ug/Kg	2/5/2016	21:23
Hexachlorocyclopentadiene	< 338	ug/Kg	2/5/2016	21:23
Hexachloroethane	< 338	ug/Kg	2/5/2016	21:23
Indeno (1,2,3-cd) pyrene	< 338	ug/Kg	2/5/2016	21:23
Isophorone	< 338	ug/Kg	2/5/2016	21:23
Naphthalene	< 338	ug/Kg	2/5/2016	21:23
Nitrobenzene	< 338	ug/Kg	2/5/2016	21:23
N-Nitroso-di-n-propylamine	< 338	ug/Kg	2/5/2016	21:23
N-Nitrosodiphenylamine	< 338	ug/Kg	2/5/2016	21:23
Phenanthrene	< 338	ug/Kg	2/5/2016	21:23
Pyrene	< 338	ug/Kg	2/5/2016	21:23

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-2 (8-11)
Lab Sample ID: 160439-02 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**51.7**	22 - 96.1		2/5/2016 21:23
Nitrobenzene-d5	**45.4**	11.6 - 83.3		2/5/2016 21:23
Terphenyl-d14	**76.1**	60.4 - 114		2/5/2016 21:23

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09991.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 6.86	ug/Kg		2/3/2016 19:44
1,1,2,2-Tetrachloroethane	< 6.86	ug/Kg		2/3/2016 19:44
1,1,2-Trichloroethane	< 6.86	ug/Kg		2/3/2016 19:44
1,1-Dichloroethane	< 6.86	ug/Kg		2/3/2016 19:44
1,1-Dichloroethene	< 6.86	ug/Kg		2/3/2016 19:44
1,2,3-Trichlorobenzene	< 17.1	ug/Kg		2/3/2016 19:44
1,2,4-Trichlorobenzene	< 17.1	ug/Kg		2/3/2016 19:44
1,2-Dibromo-3-Chloropropane	< 34.3	ug/Kg		2/3/2016 19:44
1,2-Dibromoethane	< 6.86	ug/Kg		2/3/2016 19:44
1,2-Dichlorobenzene	< 6.86	ug/Kg		2/3/2016 19:44
1,2-Dichloroethane	< 6.86	ug/Kg		2/3/2016 19:44
1,2-Dichloropropane	< 6.86	ug/Kg		2/3/2016 19:44
1,3-Dichlorobenzene	< 6.86	ug/Kg		2/3/2016 19:44
1,4-Dichlorobenzene	< 6.86	ug/Kg		2/3/2016 19:44
1,4-dioxane	< 68.6	ug/Kg		2/3/2016 19:44
2-Butanone	< 34.3	ug/Kg		2/3/2016 19:44
2-Hexanone	< 17.1	ug/Kg		2/3/2016 19:44
4-Methyl-2-pentanone	< 17.1	ug/Kg		2/3/2016 19:44
Acetone	< 34.3	ug/Kg		2/3/2016 19:44
Benzene	< 6.86	ug/Kg		2/3/2016 19:44
Bromochloromethane	< 17.1	ug/Kg		2/3/2016 19:44
Bromodichloromethane	< 6.86	ug/Kg		2/3/2016 19:44

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-2 (8-11)		
Lab Sample ID:	160439-02	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Bromoform	< 17.1	ug/Kg	2/3/2016 19:44
Bromomethane	< 6.86	ug/Kg	2/3/2016 19:44
Carbon disulfide	< 6.86	ug/Kg	2/3/2016 19:44
Carbon Tetrachloride	< 6.86	ug/Kg	2/3/2016 19:44
Chlorobenzene	< 6.86	ug/Kg	2/3/2016 19:44
Chloroethane	< 6.86	ug/Kg	2/3/2016 19:44
Chloroform	< 6.86	ug/Kg	2/3/2016 19:44
Chloromethane	< 6.86	ug/Kg	2/3/2016 19:44
cis-1,2-Dichloroethene	< 6.86	ug/Kg	2/3/2016 19:44
cis-1,3-Dichloropropene	< 6.86	ug/Kg	2/3/2016 19:44
Cyclohexane	< 34.3	ug/Kg	2/3/2016 19:44
Dibromochloromethane	< 6.86	ug/Kg	2/3/2016 19:44
Dichlorodifluoromethane	< 6.86	ug/Kg	2/3/2016 19:44
Ethylbenzene	< 6.86	ug/Kg	2/3/2016 19:44
Freon 113	< 6.86	ug/Kg	2/3/2016 19:44
Isopropylbenzene	< 6.86	ug/Kg	2/3/2016 19:44
m,p-Xylene	< 6.86	ug/Kg	2/3/2016 19:44
Methyl acetate	< 6.86	ug/Kg	2/3/2016 19:44
Methyl tert-butyl Ether	< 6.86	ug/Kg	2/3/2016 19:44
Methylcyclohexane	< 6.86	ug/Kg	2/3/2016 19:44
Methylene chloride	< 17.1	ug/Kg	2/3/2016 19:44
o-Xylene	< 6.86	ug/Kg	2/3/2016 19:44
Styrene	< 17.1	ug/Kg	2/3/2016 19:44
Tetrachloroethene	< 6.86	ug/Kg	2/3/2016 19:44
Toluene	< 6.86	ug/Kg	2/3/2016 19:44
trans-1,2-Dichloroethene	< 6.86	ug/Kg	2/3/2016 19:44
trans-1,3-Dichloropropene	< 6.86	ug/Kg	2/3/2016 19:44
Trichloroethene	< 6.86	ug/Kg	2/3/2016 19:44
Trichlorofluoromethane	< 6.86	ug/Kg	2/3/2016 19:44
Vinyl chloride	< 6.86	ug/Kg	2/3/2016 19:44

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-2 (8-11)

Lab Sample ID: 160439-02 **Date Sampled:** 2/1/2016

Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**110**	83 - 126		2/3/2016	19:44
4-Bromofluorobenzene	**88.0**	80.8 - 115		2/3/2016	19:44
Pentafluorobenzene	**93.8**	90.6 - 111		2/3/2016	19:44
Toluene-D8	**96.6**	89.2 - 109		2/3/2016	19:44

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

Data File: x29398.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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-3 (8-12)
Lab Sample ID: 160439-03 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0363**	mg/Kg		2/4/2016 18:40

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**7530**	mg/Kg		2/5/2016 12:55
Antimony	< 3.43	mg/Kg		2/5/2016 12:55
Arsenic	**4.42**	mg/Kg		2/5/2016 12:55
Barium	**44.4**	mg/Kg		2/5/2016 12:55
Beryllium	**0.474**	mg/Kg		2/5/2016 12:55
Cadmium	< 0.286	mg/Kg		2/5/2016 12:55
Calcium	**1590**	mg/Kg		2/5/2016 12:55
Chromium	**11.0**	mg/Kg		2/5/2016 12:55
Cobalt	**5.57**	mg/Kg		2/5/2016 12:55
Copper	**16.7**	mg/Kg		2/5/2016 12:55
Iron	**13300**	mg/Kg		2/5/2016 12:55
Lead	**9.13**	mg/Kg		2/5/2016 12:55
Magnesium	**2100**	mg/Kg		2/5/2016 12:55
Manganese	**72.1**	mg/Kg		2/5/2016 12:55
Nickel	**13.8**	mg/Kg		2/5/2016 12:55
Potassium	**894**	mg/Kg		2/5/2016 12:55
Selenium	< 0.572	mg/Kg		2/5/2016 12:55
Silver	< 0.572	mg/Kg		2/5/2016 12:55
Sodium	**156**	mg/Kg		2/5/2016 12:55
Thallium	< 1.43	mg/Kg		2/5/2016 12:55
Vanadium	**18.7**	mg/Kg		2/5/2016 12:55
Zinc	**34.9**	mg/Kg		2/5/2016 12:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-3 (8-12)
Lab Sample ID: 160439-03 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 336	ug/Kg		2/5/2016 21:52
1,2,4,5-Tetrachlorobenzene	< 336	ug/Kg		2/5/2016 21:52
1,2,4-Trichlorobenzene	< 336	ug/Kg		2/5/2016 21:52
1,2-Dichlorobenzene	< 336	ug/Kg		2/5/2016 21:52
1,3-Dichlorobenzene	< 336	ug/Kg		2/5/2016 21:52
1,4-Dichlorobenzene	< 336	ug/Kg		2/5/2016 21:52
2,4-Dinitrotoluene	< 336	ug/Kg		2/5/2016 21:52
2,6-Dinitrotoluene	< 336	ug/Kg		2/5/2016 21:52
2-Chloronaphthalene	< 336	ug/Kg		2/5/2016 21:52
2-Methylnapthalene	< 336	ug/Kg		2/5/2016 21:52
2-Nitroaniline	< 671	ug/Kg		2/5/2016 21:52
3,3'-Dichlorobenzidine	< 336	ug/Kg		2/5/2016 21:52
3-Nitroaniline	< 671	ug/Kg		2/5/2016 21:52
4-Bromophenyl phenyl ether	< 336	ug/Kg		2/5/2016 21:52
4-Chloroaniline	< 336	ug/Kg		2/5/2016 21:52
4-Chlorophenyl phenyl ether	< 336	ug/Kg		2/5/2016 21:52
4-Nitroaniline	< 671	ug/Kg		2/5/2016 21:52
Acenaphthene	< 336	ug/Kg		2/5/2016 21:52
Acenaphthylene	< 336	ug/Kg		2/5/2016 21:52
Acetophenone	< 336	ug/Kg		2/5/2016 21:52
Anthracene	< 336	ug/Kg		2/5/2016 21:52
Atrazine	< 336	ug/Kg		2/5/2016 21:52
Benzaldehyde	< 336	ug/Kg		2/5/2016 21:52
Benzo (a) anthracene	< 336	ug/Kg		2/5/2016 21:52
Benzo (a) pyrene	< 336	ug/Kg		2/5/2016 21:52
Benzo (b) fluoranthene	< 336	ug/Kg		2/5/2016 21:52

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-3 (8-12)		
Lab Sample ID:	160439-03	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Benzo (g,h,i) perylene	< 336	ug/Kg	2/5/2016 21:52
Benzo (k) fluoranthene	< 336	ug/Kg	2/5/2016 21:52
Bis (2-chloroethoxy) methane	< 336	ug/Kg	2/5/2016 21:52
Bis (2-chloroethyl) ether	< 336	ug/Kg	2/5/2016 21:52
Bis (2-chloroisopropyl) ether	< 336	ug/Kg	2/5/2016 21:52
Bis (2-ethylhexyl) phthalate	< 336	ug/Kg	2/5/2016 21:52
Butylbenzylphthalate	< 336	ug/Kg	2/5/2016 21:52
Caprolactam	< 336	ug/Kg	2/5/2016 21:52
Carbazole	< 336	ug/Kg	2/5/2016 21:52
Chrysene	< 336	ug/Kg	2/5/2016 21:52
Dibenz (a,h) anthracene	< 336	ug/Kg	2/5/2016 21:52
Dibenzofuran	< 336	ug/Kg	2/5/2016 21:52
Diethyl phthalate	< 336	ug/Kg	2/5/2016 21:52
Dimethyl phthalate	< 671	ug/Kg	2/5/2016 21:52
Di-n-butyl phthalate	< 336	ug/Kg	2/5/2016 21:52
Di-n-octylphthalate	< 336	ug/Kg	2/5/2016 21:52
Fluoranthene	< 336	ug/Kg	2/5/2016 21:52
Fluorene	< 336	ug/Kg	2/5/2016 21:52
Hexachlorobenzene	< 336	ug/Kg	2/5/2016 21:52
Hexachlorobutadiene	< 336	ug/Kg	2/5/2016 21:52
Hexachlorocyclopentadiene	< 336	ug/Kg	2/5/2016 21:52
Hexachloroethane	< 336	ug/Kg	2/5/2016 21:52
Indeno (1,2,3-cd) pyrene	< 336	ug/Kg	2/5/2016 21:52
Isophorone	< 336	ug/Kg	2/5/2016 21:52
Naphthalene	< 336	ug/Kg	2/5/2016 21:52
Nitrobenzene	< 336	ug/Kg	2/5/2016 21:52
N-Nitroso-di-n-propylamine	< 336	ug/Kg	2/5/2016 21:52
N-Nitrosodiphenylamine	< 336	ug/Kg	2/5/2016 21:52
Phenanthrene	< 336	ug/Kg	2/5/2016 21:52
Pyrene	< 336	ug/Kg	2/5/2016 21:52

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-3 (8-12)
Lab Sample ID: 160439-03 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**57.8**	22 - 96.1		2/5/2016 21:52
Nitrobenzene-d5	**45.5**	11.6 - 83.3		2/5/2016 21:52
Terphenyl-d14	**78.4**	60.4 - 114		2/5/2016 21:52

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09992.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.80	ug/Kg		2/3/2016 20:08
1,1,2,2-Tetrachloroethane	< 7.80	ug/Kg		2/3/2016 20:08
1,1,2-Trichloroethane	< 7.80	ug/Kg		2/3/2016 20:08
1,1-Dichloroethane	< 7.80	ug/Kg		2/3/2016 20:08
1,1-Dichloroethene	< 7.80	ug/Kg		2/3/2016 20:08
1,2,3-Trichlorobenzene	< 19.5	ug/Kg		2/3/2016 20:08
1,2,4-Trichlorobenzene	< 19.5	ug/Kg		2/3/2016 20:08
1,2-Dibromo-3-Chloropropane	< 39.0	ug/Kg		2/3/2016 20:08
1,2-Dibromoethane	< 7.80	ug/Kg		2/3/2016 20:08
1,2-Dichlorobenzene	< 7.80	ug/Kg		2/3/2016 20:08
1,2-Dichloroethane	< 7.80	ug/Kg		2/3/2016 20:08
1,2-Dichloropropane	< 7.80	ug/Kg		2/3/2016 20:08
1,3-Dichlorobenzene	< 7.80	ug/Kg		2/3/2016 20:08
1,4-Dichlorobenzene	< 7.80	ug/Kg		2/3/2016 20:08
1,4-dioxane	< 78.0	ug/Kg		2/3/2016 20:08
2-Butanone	< 39.0	ug/Kg		2/3/2016 20:08
2-Hexanone	< 19.5	ug/Kg		2/3/2016 20:08
4-Methyl-2-pentanone	< 19.5	ug/Kg		2/3/2016 20:08
Acetone	< 39.0	ug/Kg		2/3/2016 20:08
Benzene	< 7.80	ug/Kg		2/3/2016 20:08
Bromochloromethane	< 19.5	ug/Kg		2/3/2016 20:08
Bromodichloromethane	< 7.80	ug/Kg		2/3/2016 20:08

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-3 (8-12)		
Lab Sample ID:	160439-03	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Bromoform	< 19.5	ug/Kg	2/3/2016	20:08
Bromomethane	< 7.80	ug/Kg	2/3/2016	20:08
Carbon disulfide	< 7.80	ug/Kg	2/3/2016	20:08
Carbon Tetrachloride	< 7.80	ug/Kg	2/3/2016	20:08
Chlorobenzene	< 7.80	ug/Kg	2/3/2016	20:08
Chloroethane	< 7.80	ug/Kg	2/3/2016	20:08
Chloroform	< 7.80	ug/Kg	2/3/2016	20:08
Chloromethane	< 7.80	ug/Kg	2/3/2016	20:08
cis-1,2-Dichloroethene	< 7.80	ug/Kg	2/3/2016	20:08
cis-1,3-Dichloropropene	< 7.80	ug/Kg	2/3/2016	20:08
Cyclohexane	< 39.0	ug/Kg	2/3/2016	20:08
Dibromochloromethane	< 7.80	ug/Kg	2/3/2016	20:08
Dichlorodifluoromethane	< 7.80	ug/Kg	2/3/2016	20:08
Ethylbenzene	< 7.80	ug/Kg	2/3/2016	20:08
Freon 113	< 7.80	ug/Kg	2/3/2016	20:08
Isopropylbenzene	< 7.80	ug/Kg	2/3/2016	20:08
m,p-Xylene	< 7.80	ug/Kg	2/3/2016	20:08
Methyl acetate	< 7.80	ug/Kg	2/3/2016	20:08
Methyl tert-butyl Ether	< 7.80	ug/Kg	2/3/2016	20:08
Methylcyclohexane	< 7.80	ug/Kg	2/3/2016	20:08
Methylene chloride	< 19.5	ug/Kg	2/3/2016	20:08
o-Xylene	< 7.80	ug/Kg	2/3/2016	20:08
Styrene	< 19.5	ug/Kg	2/3/2016	20:08
Tetrachloroethene	< 7.80	ug/Kg	2/3/2016	20:08
Toluene	< 7.80	ug/Kg	2/3/2016	20:08
trans-1,2-Dichloroethene	< 7.80	ug/Kg	2/3/2016	20:08
trans-1,3-Dichloropropene	< 7.80	ug/Kg	2/3/2016	20:08
Trichloroethene	< 7.80	ug/Kg	2/3/2016	20:08
Trichlorofluoromethane	< 7.80	ug/Kg	2/3/2016	20:08
Vinyl chloride	< 7.80	ug/Kg	2/3/2016	20:08

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-3 (8-12)

Lab Sample ID: 160439-03 **Date Sampled:** 2/1/2016

Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**109**	83 - 126		2/3/2016	20:08
4-Bromofluorobenzene	**93.2**	80.8 - 115		2/3/2016	20:08
Pentafluorobenzene	**94.3**	90.6 - 111		2/3/2016	20:08
Toluene-D8	**97.8**	89.2 - 109		2/3/2016	20:08

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

Data File: x29399.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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-4 (8-12)
Lab Sample ID: 160439-04 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0553**	mg/Kg		2/4/2016 18:43

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**6260**	mg/Kg		2/5/2016 12:59
Antimony	< 3.17	mg/Kg		2/5/2016 12:59
Arsenic	**4.63**	mg/Kg		2/5/2016 12:59
Barium	**28.1**	mg/Kg		2/5/2016 12:59
Beryllium	**0.301**	mg/Kg		2/5/2016 12:59
Cadmium	< 0.264	mg/Kg		2/5/2016 12:59
Calcium	**32100**	mg/Kg		2/5/2016 16:47
Chromium	**9.15**	mg/Kg		2/5/2016 12:59
Cobalt	**4.70**	mg/Kg		2/5/2016 12:59
Copper	**11.9**	mg/Kg		2/5/2016 12:59
Iron	**12300**	mg/Kg		2/5/2016 12:59
Lead	**21.7**	mg/Kg		2/5/2016 12:59
Magnesium	**8410**	mg/Kg		2/5/2016 12:59
Manganese	**175**	mg/Kg		2/5/2016 12:59
Nickel	**11.0**	mg/Kg		2/5/2016 12:59
Potassium	**1140**	mg/Kg		2/5/2016 12:59
Selenium	< 0.529	mg/Kg		2/5/2016 12:59
Silver	< 0.529	mg/Kg		2/5/2016 12:59
Sodium	< 132	mg/Kg		2/5/2016 12:59
Thallium	< 1.32	mg/Kg		2/5/2016 12:59
Vanadium	**14.1**	mg/Kg		2/5/2016 12:59
Zinc	**60.4**	mg/Kg		2/5/2016 12:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-4 (8-12)
Lab Sample ID: 160439-04 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 320	ug/Kg		2/5/2016 23:17
1,2,4,5-Tetrachlorobenzene	< 320	ug/Kg		2/5/2016 23:17
1,2,4-Trichlorobenzene	< 320	ug/Kg		2/5/2016 23:17
1,2-Dichlorobenzene	< 320	ug/Kg		2/5/2016 23:17
1,3-Dichlorobenzene	< 320	ug/Kg		2/5/2016 23:17
1,4-Dichlorobenzene	< 320	ug/Kg		2/5/2016 23:17
2,4-Dinitrotoluene	< 320	ug/Kg		2/5/2016 23:17
2,6-Dinitrotoluene	< 320	ug/Kg		2/5/2016 23:17
2-Chloronaphthalene	< 320	ug/Kg		2/5/2016 23:17
2-Methylnapthalene	< 320	ug/Kg		2/5/2016 23:17
2-Nitroaniline	< 639	ug/Kg		2/5/2016 23:17
3,3'-Dichlorobenzidine	< 320	ug/Kg		2/5/2016 23:17
3-Nitroaniline	< 639	ug/Kg		2/5/2016 23:17
4-Bromophenyl phenyl ether	< 320	ug/Kg		2/5/2016 23:17
4-Chloroaniline	< 320	ug/Kg		2/5/2016 23:17
4-Chlorophenyl phenyl ether	< 320	ug/Kg		2/5/2016 23:17
4-Nitroaniline	< 639	ug/Kg		2/5/2016 23:17
Acenaphthene	< 320	ug/Kg		2/5/2016 23:17
Acenaphthylene	< 320	ug/Kg		2/5/2016 23:17
Acetophenone	< 320	ug/Kg		2/5/2016 23:17
Anthracene	< 320	ug/Kg		2/5/2016 23:17
Atrazine	< 320	ug/Kg		2/5/2016 23:17
Benzaldehyde	< 320	ug/Kg		2/5/2016 23:17
Benzo (a) anthracene	< 320	ug/Kg		2/5/2016 23:17
Benzo (a) pyrene	< 320	ug/Kg		2/5/2016 23:17
Benzo (b) fluoranthene	< 320	ug/Kg		2/5/2016 23:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-4 (8-12)		
Lab Sample ID:	160439-04	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Benzo (g,h,i) perylene	< 320	ug/Kg	2/5/2016 23:17
Benzo (k) fluoranthene	< 320	ug/Kg	2/5/2016 23:17
Bis (2-chloroethoxy) methane	< 320	ug/Kg	2/5/2016 23:17
Bis (2-chloroethyl) ether	< 320	ug/Kg	2/5/2016 23:17
Bis (2-chloroisopropyl) ether	< 320	ug/Kg	2/5/2016 23:17
Bis (2-ethylhexyl) phthalate	< 320	ug/Kg	2/5/2016 23:17
Butylbenzylphthalate	< 320	ug/Kg	2/5/2016 23:17
Caprolactam	< 320	ug/Kg	2/5/2016 23:17
Carbazole	< 320	ug/Kg	2/5/2016 23:17
Chrysene	< 320	ug/Kg	2/5/2016 23:17
Dibenz (a,h) anthracene	< 320	ug/Kg	2/5/2016 23:17
Dibenzofuran	< 320	ug/Kg	2/5/2016 23:17
Diethyl phthalate	< 320	ug/Kg	2/5/2016 23:17
Dimethyl phthalate	< 639	ug/Kg	2/5/2016 23:17
Di-n-butyl phthalate	< 320	ug/Kg	2/5/2016 23:17
Di-n-octylphthalate	< 320	ug/Kg	2/5/2016 23:17
Fluoranthene	< 320	ug/Kg	2/5/2016 23:17
Fluorene	< 320	ug/Kg	2/5/2016 23:17
Hexachlorobenzene	< 320	ug/Kg	2/5/2016 23:17
Hexachlorobutadiene	< 320	ug/Kg	2/5/2016 23:17
Hexachlorocyclopentadiene	< 320	ug/Kg	2/5/2016 23:17
Hexachloroethane	< 320	ug/Kg	2/5/2016 23:17
Indeno (1,2,3-cd) pyrene	< 320	ug/Kg	2/5/2016 23:17
Isophorone	< 320	ug/Kg	2/5/2016 23:17
Naphthalene	< 320	ug/Kg	2/5/2016 23:17
Nitrobenzene	< 320	ug/Kg	2/5/2016 23:17
N-Nitroso-di-n-propylamine	< 320	ug/Kg	2/5/2016 23:17
N-Nitrosodiphenylamine	< 320	ug/Kg	2/5/2016 23:17
Phenanthrene	< 320	ug/Kg	2/5/2016 23:17
Pyrene	< 320	ug/Kg	2/5/2016 23:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-4 (8-12)
Lab Sample ID: 160439-04 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**47.2**	22 - 96.1		2/5/2016 23:17
Nitrobenzene-d5	**42.7**	11.6 - 83.3		2/5/2016 23:17
Terphenyl-d14	**72.8**	60.4 - 114		2/5/2016 23:17

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09995.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.32	ug/Kg		2/3/2016 20:32
1,1,2,2-Tetrachloroethane	< 8.32	ug/Kg		2/3/2016 20:32
1,1,2-Trichloroethane	< 8.32	ug/Kg		2/3/2016 20:32
1,1-Dichloroethane	< 8.32	ug/Kg		2/3/2016 20:32
1,1-Dichloroethene	< 8.32	ug/Kg		2/3/2016 20:32
1,2,3-Trichlorobenzene	< 20.8	ug/Kg		2/3/2016 20:32
1,2,4-Trichlorobenzene	< 20.8	ug/Kg		2/3/2016 20:32
1,2-Dibromo-3-Chloropropane	< 41.6	ug/Kg		2/3/2016 20:32
1,2-Dibromoethane	< 8.32	ug/Kg		2/3/2016 20:32
1,2-Dichlorobenzene	< 8.32	ug/Kg		2/3/2016 20:32
1,2-Dichloroethane	< 8.32	ug/Kg		2/3/2016 20:32
1,2-Dichloropropane	< 8.32	ug/Kg		2/3/2016 20:32
1,3-Dichlorobenzene	< 8.32	ug/Kg		2/3/2016 20:32
1,4-Dichlorobenzene	< 8.32	ug/Kg		2/3/2016 20:32
1,4-dioxane	< 83.2	ug/Kg		2/3/2016 20:32
2-Butanone	< 41.6	ug/Kg		2/3/2016 20:32
2-Hexanone	< 20.8	ug/Kg		2/3/2016 20:32
4-Methyl-2-pentanone	< 20.8	ug/Kg		2/3/2016 20:32
Acetone	< 41.6	ug/Kg		2/3/2016 20:32
Benzene	< 8.32	ug/Kg		2/3/2016 20:32
Bromochloromethane	< 20.8	ug/Kg		2/3/2016 20:32
Bromodichloromethane	< 8.32	ug/Kg		2/3/2016 20:32

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-4 (8-12)		
Lab Sample ID:	160439-04	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Bromoform	< 20.8	ug/Kg	2/3/2016 20:32
Bromomethane	< 8.32	ug/Kg	2/3/2016 20:32
Carbon disulfide	< 8.32	ug/Kg	2/3/2016 20:32
Carbon Tetrachloride	< 8.32	ug/Kg	2/3/2016 20:32
Chlorobenzene	< 8.32	ug/Kg	2/3/2016 20:32
Chloroethane	< 8.32	ug/Kg	2/3/2016 20:32
Chloroform	< 8.32	ug/Kg	2/3/2016 20:32
Chloromethane	< 8.32	ug/Kg	2/3/2016 20:32
cis-1,2-Dichloroethene	< 8.32	ug/Kg	2/3/2016 20:32
cis-1,3-Dichloropropene	< 8.32	ug/Kg	2/3/2016 20:32
Cyclohexane	< 41.6	ug/Kg	2/3/2016 20:32
Dibromochloromethane	< 8.32	ug/Kg	2/3/2016 20:32
Dichlorodifluoromethane	< 8.32	ug/Kg	2/3/2016 20:32
Ethylbenzene	< 8.32	ug/Kg	2/3/2016 20:32
Freon 113	< 8.32	ug/Kg	2/3/2016 20:32
Isopropylbenzene	< 8.32	ug/Kg	2/3/2016 20:32
m,p-Xylene	< 8.32	ug/Kg	2/3/2016 20:32
Methyl acetate	< 8.32	ug/Kg	2/3/2016 20:32
Methyl tert-butyl Ether	< 8.32	ug/Kg	2/3/2016 20:32
Methylcyclohexane	< 8.32	ug/Kg	2/3/2016 20:32
Methylene chloride	< 20.8	ug/Kg	2/3/2016 20:32
o-Xylene	< 8.32	ug/Kg	2/3/2016 20:32
Styrene	< 20.8	ug/Kg	2/3/2016 20:32
Tetrachloroethene	< 8.32	ug/Kg	2/3/2016 20:32
Toluene	< 8.32	ug/Kg	2/3/2016 20:32
trans-1,2-Dichloroethene	< 8.32	ug/Kg	2/3/2016 20:32
trans-1,3-Dichloropropene	< 8.32	ug/Kg	2/3/2016 20:32
Trichloroethene	< 8.32	ug/Kg	2/3/2016 20:32
Trichlorofluoromethane	< 8.32	ug/Kg	2/3/2016 20:32
Vinyl chloride	< 8.32	ug/Kg	2/3/2016 20:32

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-4 (8-12)

Lab Sample ID: 160439-04 **Date Sampled:** 2/1/2016

Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**110**	83 - 126		2/3/2016	20:32
4-Bromofluorobenzene	**89.7**	80.8 - 115		2/3/2016	20:32
Pentafluorobenzene	**93.7**	90.6 - 111		2/3/2016	20:32
Toluene-D8	**96.3**	89.2 - 109		2/3/2016	20:32

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

Data File: x29400.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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-5 (12-13.5)
Lab Sample ID: 160439-05 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0574**	mg/Kg		2/4/2016 18:47

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**4950**	mg/Kg		2/5/2016 13:03
Antimony	< 3.49	mg/Kg		2/5/2016 13:03
Arsenic	**5.13**	mg/Kg		2/5/2016 13:03
Barium	**32.0**	mg/Kg		2/5/2016 13:03
Beryllium	< 0.291	mg/Kg		2/5/2016 13:03
Cadmium	< 0.291	mg/Kg		2/5/2016 13:03
Calcium	**85900**	mg/Kg		2/5/2016 16:55
Chromium	**8.16**	mg/Kg		2/5/2016 13:03
Cobalt	**3.18**	mg/Kg		2/5/2016 13:03
Copper	**15.2**	mg/Kg		2/5/2016 13:03
Iron	**8930**	mg/Kg		2/5/2016 13:03
Lead	**59.2**	mg/Kg		2/5/2016 13:03
Magnesium	**47000**	mg/Kg		2/5/2016 16:55
Manganese	**240**	mg/Kg		2/5/2016 13:03
Nickel	**7.87**	mg/Kg		2/5/2016 13:03
Potassium	**822**	mg/Kg		2/5/2016 13:03
Selenium	< 0.581	mg/Kg		2/5/2016 13:03
Silver	**0.641**	mg/Kg		2/5/2016 13:03
Sodium	**185**	mg/Kg		2/5/2016 13:03
Thallium	< 1.45	mg/Kg		2/5/2016 13:03
Vanadium	**12.4**	mg/Kg		2/5/2016 13:03
Zinc	**79.8**	mg/Kg		2/5/2016 13:03

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-5 (12-13.5)
Lab Sample ID: 160439-05 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 326	ug/Kg		2/5/2016 23:46
1,2,4,5-Tetrachlorobenzene	< 326	ug/Kg		2/5/2016 23:46
1,2,4-Trichlorobenzene	< 326	ug/Kg		2/5/2016 23:46
1,2-Dichlorobenzene	< 326	ug/Kg		2/5/2016 23:46
1,3-Dichlorobenzene	< 326	ug/Kg		2/5/2016 23:46
1,4-Dichlorobenzene	< 326	ug/Kg		2/5/2016 23:46
2,4-Dinitrotoluene	< 326	ug/Kg		2/5/2016 23:46
2,6-Dinitrotoluene	< 326	ug/Kg		2/5/2016 23:46
2-Chloronaphthalene	< 326	ug/Kg		2/5/2016 23:46
2-Methylnapthalene	< 326	ug/Kg		2/5/2016 23:46
2-Nitroaniline	< 651	ug/Kg		2/5/2016 23:46
3,3'-Dichlorobenzidine	< 326	ug/Kg		2/5/2016 23:46
3-Nitroaniline	< 651	ug/Kg		2/5/2016 23:46
4-Bromophenyl phenyl ether	< 326	ug/Kg		2/5/2016 23:46
4-Chloroaniline	< 326	ug/Kg		2/5/2016 23:46
4-Chlorophenyl phenyl ether	< 326	ug/Kg		2/5/2016 23:46
4-Nitroaniline	< 651	ug/Kg		2/5/2016 23:46
Acenaphthene	< 326	ug/Kg		2/5/2016 23:46
Acenaphthylene	< 326	ug/Kg		2/5/2016 23:46
Acetophenone	< 326	ug/Kg		2/5/2016 23:46
Anthracene	< 326	ug/Kg		2/5/2016 23:46
Atrazine	< 326	ug/Kg		2/5/2016 23:46
Benzaldehyde	< 326	ug/Kg		2/5/2016 23:46
Benzo (a) anthracene	< 326	ug/Kg		2/5/2016 23:46
Benzo (a) pyrene	< 326	ug/Kg		2/5/2016 23:46
Benzo (b) fluoranthene	< 326	ug/Kg		2/5/2016 23:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SB-5 (12-13.5)		
Lab Sample ID:	160439-05	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Benzo (g,h,i) perylene	< 326	ug/Kg	2/5/2016 23:46
Benzo (k) fluoranthene	< 326	ug/Kg	2/5/2016 23:46
Bis (2-chloroethoxy) methane	< 326	ug/Kg	2/5/2016 23:46
Bis (2-chloroethyl) ether	< 326	ug/Kg	2/5/2016 23:46
Bis (2-chloroisopropyl) ether	< 326	ug/Kg	2/5/2016 23:46
Bis (2-ethylhexyl) phthalate	< 326	ug/Kg	2/5/2016 23:46
Butylbenzylphthalate	< 326	ug/Kg	2/5/2016 23:46
Caprolactam	< 326	ug/Kg	2/5/2016 23:46
Carbazole	< 326	ug/Kg	2/5/2016 23:46
Chrysene	< 326	ug/Kg	2/5/2016 23:46
Dibenz (a,h) anthracene	< 326	ug/Kg	2/5/2016 23:46
Dibenzofuran	< 326	ug/Kg	2/5/2016 23:46
Diethyl phthalate	< 326	ug/Kg	2/5/2016 23:46
Dimethyl phthalate	< 651	ug/Kg	2/5/2016 23:46
Di-n-butyl phthalate	< 326	ug/Kg	2/5/2016 23:46
Di-n-octylphthalate	< 326	ug/Kg	2/5/2016 23:46
Fluoranthene	< 326	ug/Kg	2/5/2016 23:46
Fluorene	< 326	ug/Kg	2/5/2016 23:46
Hexachlorobenzene	< 326	ug/Kg	2/5/2016 23:46
Hexachlorobutadiene	< 326	ug/Kg	2/5/2016 23:46
Hexachlorocyclopentadiene	< 326	ug/Kg	2/5/2016 23:46
Hexachloroethane	< 326	ug/Kg	2/5/2016 23:46
Indeno (1,2,3-cd) pyrene	< 326	ug/Kg	2/5/2016 23:46
Isophorone	< 326	ug/Kg	2/5/2016 23:46
Naphthalene	< 326	ug/Kg	2/5/2016 23:46
Nitrobenzene	< 326	ug/Kg	2/5/2016 23:46
N-Nitroso-di-n-propylamine	< 326	ug/Kg	2/5/2016 23:46
N-Nitrosodiphenylamine	< 326	ug/Kg	2/5/2016 23:46
Phenanthrene	< 326	ug/Kg	2/5/2016 23:46
Pyrene	< 326	ug/Kg	2/5/2016 23:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-5 (12-13.5)
Lab Sample ID: 160439-05 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**47.0**	22 - 96.1		2/5/2016 23:46
Nitrobenzene-d5	**42.2**	11.6 - 83.3		2/5/2016 23:46
Terphenyl-d14	**79.6**	60.4 - 114		2/5/2016 23:46

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09996.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.61	ug/Kg		2/3/2016 20:56
1,1,2,2-Tetrachloroethane	< 8.61	ug/Kg		2/3/2016 20:56
1,1,2-Trichloroethane	< 8.61	ug/Kg		2/3/2016 20:56
1,1-Dichloroethane	< 8.61	ug/Kg		2/3/2016 20:56
1,1-Dichloroethene	< 8.61	ug/Kg		2/3/2016 20:56
1,2,3-Trichlorobenzene	< 21.5	ug/Kg		2/3/2016 20:56
1,2,4-Trichlorobenzene	< 21.5	ug/Kg		2/3/2016 20:56
1,2-Dibromo-3-Chloropropane	< 43.1	ug/Kg		2/3/2016 20:56
1,2-Dibromoethane	< 8.61	ug/Kg		2/3/2016 20:56
1,2-Dichlorobenzene	< 8.61	ug/Kg		2/3/2016 20:56
1,2-Dichloroethane	< 8.61	ug/Kg		2/3/2016 20:56
1,2-Dichloropropane	< 8.61	ug/Kg		2/3/2016 20:56
1,3-Dichlorobenzene	< 8.61	ug/Kg		2/3/2016 20:56
1,4-Dichlorobenzene	< 8.61	ug/Kg		2/3/2016 20:56
1,4-dioxane	< 86.1	ug/Kg		2/3/2016 20:56
2-Butanone	< 43.1	ug/Kg		2/3/2016 20:56
2-Hexanone	< 21.5	ug/Kg		2/3/2016 20:56
4-Methyl-2-pentanone	< 21.5	ug/Kg		2/3/2016 20:56
Acetone	< 43.1	ug/Kg		2/3/2016 20:56
Benzene	< 8.61	ug/Kg		2/3/2016 20:56
Bromochloromethane	< 21.5	ug/Kg		2/3/2016 20:56
Bromodichloromethane	< 8.61	ug/Kg		2/3/2016 20:56

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-5 (12-13.5)
Lab Sample ID: 160439-05 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Bromoform	< 21.5	ug/Kg	2/3/2016	20:56
Bromomethane	< 8.61	ug/Kg	2/3/2016	20:56
Carbon disulfide	< 8.61	ug/Kg	2/3/2016	20:56
Carbon Tetrachloride	< 8.61	ug/Kg	2/3/2016	20:56
Chlorobenzene	< 8.61	ug/Kg	2/3/2016	20:56
Chloroethane	< 8.61	ug/Kg	2/3/2016	20:56
Chloroform	< 8.61	ug/Kg	2/3/2016	20:56
Chloromethane	< 8.61	ug/Kg	2/3/2016	20:56
cis-1,2-Dichloroethene	< 8.61	ug/Kg	2/3/2016	20:56
cis-1,3-Dichloropropene	< 8.61	ug/Kg	2/3/2016	20:56
Cyclohexane	< 43.1	ug/Kg	2/3/2016	20:56
Dibromochloromethane	< 8.61	ug/Kg	2/3/2016	20:56
Dichlorodifluoromethane	< 8.61	ug/Kg	2/3/2016	20:56
Ethylbenzene	< 8.61	ug/Kg	2/3/2016	20:56
Freon 113	< 8.61	ug/Kg	2/3/2016	20:56
Isopropylbenzene	< 8.61	ug/Kg	2/3/2016	20:56
m,p-Xylene	< 8.61	ug/Kg	2/3/2016	20:56
Methyl acetate	< 8.61	ug/Kg	2/3/2016	20:56
Methyl tert-butyl Ether	< 8.61	ug/Kg	2/3/2016	20:56
Methylcyclohexane	< 8.61	ug/Kg	2/3/2016	20:56
Methylene chloride	< 21.5	ug/Kg	2/3/2016	20:56
o-Xylene	< 8.61	ug/Kg	2/3/2016	20:56
Styrene	< 21.5	ug/Kg	2/3/2016	20:56
Tetrachloroethene	< 8.61	ug/Kg	2/3/2016	20:56
Toluene	< 8.61	ug/Kg	2/3/2016	20:56
trans-1,2-Dichloroethene	< 8.61	ug/Kg	2/3/2016	20:56
trans-1,3-Dichloropropene	< 8.61	ug/Kg	2/3/2016	20:56
Trichloroethene	< 8.61	ug/Kg	2/3/2016	20:56
Trichlorofluoromethane	< 8.61	ug/Kg	2/3/2016	20:56
Vinyl chloride	< 8.61	ug/Kg	2/3/2016	20:56

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SB-5 (12-13.5)

Lab Sample ID: 160439-05 **Date Sampled:** 2/1/2016

Matrix: Soil **Date Received:** 2/1/2016

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**111**	83 - 126		2/3/2016	20:56
4-Bromofluorobenzene	**88.5**	80.8 - 115		2/3/2016	20:56
Pentafluorobenzene	**91.7**	90.6 - 111		2/3/2016	20:56
Toluene-D8	**95.6**	89.2 - 109		2/3/2016	20:56

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

Data File: x29401.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: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-1
Lab Sample ID: 160439-06 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1221	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1232	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1242	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1248	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1254	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1260	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1262	< 0.414	mg/Kg		2/5/2016 18:34
PCB-1268	< 0.414	mg/Kg		2/5/2016 18:34

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**71.6**	17.6 - 142		2/5/2016 18:34
Tetrachloro-m-xylene	**49.3**	0 - 152		2/5/2016 18:34

Method Reference(s): EPA 8082A
EPA 3550C
Preparation Date: 2/5/2016

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-2
Lab Sample ID: 160439-07 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1221	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1232	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1242	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1248	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1254	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1260	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1262	< 0.462	mg/Kg		2/5/2016 18:57
PCB-1268	< 0.462	mg/Kg		2/5/2016 18:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**75.9**	17.6 - 142		2/5/2016 18:57
Tetrachloro-m-xylene	**66.4**	0 - 152		2/5/2016 18:57

Method Reference(s): EPA 8082A
EPA 3550C
Preparation Date: 2/5/2016

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-3
Lab Sample ID: 160439-08 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0176**	mg/Kg		2/4/2016 19:04

Method Reference(s): EPA 7471B
Preparation Date: 2/4/2016
Data File: Hg160204C

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**4600**	mg/Kg		2/5/2016 13:16
Antimony	< 3.25	mg/Kg	M	2/5/2016 13:16
Arsenic	**3.50**	mg/Kg		2/5/2016 13:16
Barium	**45.1**	mg/Kg	DM	2/5/2016 13:16
Beryllium	< 0.271	mg/Kg		2/5/2016 13:16
Cadmium	< 0.271	mg/Kg	M	2/5/2016 13:16
Calcium	**54800**	mg/Kg		2/5/2006 17:08
Chromium	**7.55**	mg/Kg		2/5/2016 13:16
Cobalt	**3.77**	mg/Kg		2/5/2016 13:16
Copper	**15.5**	mg/Kg		2/5/2016 13:16
Iron	**10500**	mg/Kg		2/5/2016 13:16
Lead	**19.2**	mg/Kg	M	2/5/2016 13:16
Magnesium	**11200**	mg/Kg		2/5/2016 13:16
Manganese	**397**	mg/Kg	DM	2/5/2016 13:16
Nickel	**8.30**	mg/Kg		2/5/2016 13:16
Potassium	**987**	mg/Kg		2/5/2016 13:16
Selenium	< 0.542	mg/Kg		2/5/2016 13:16
Silver	< 0.542	mg/Kg		2/5/2016 13:16
Sodium	< 136	mg/Kg		2/5/2016 13:16
Thallium	< 1.36	mg/Kg	M	2/5/2016 13:16
Vanadium	**11.7**	mg/Kg		2/5/2016 13:16
Zinc	**64.1**	mg/Kg	DM	2/5/2016 13:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SS-3		
Lab Sample ID:	160439-08	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/4/2016
Data File: 020516a

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1221	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1232	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1242	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1248	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1254	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1260	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1262	< 0.345	mg/Kg		2/5/2016 19:20
PCB-1268	< 0.345	mg/Kg		2/5/2016 19:20

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**84.1**	17.6 - 142		2/5/2016 19:20
Tetrachloro-m-xylene	**77.5**	0 - 152		2/5/2016 19:20

Method Reference(s): EPA 8082A
EPA 3550C
Preparation Date: 2/5/2016

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 312	ug/Kg		2/6/2016 00:15
1,2,4,5-Tetrachlorobenzene	< 312	ug/Kg		2/6/2016 00:15
1,2,4-Trichlorobenzene	< 312	ug/Kg		2/6/2016 00:15
1,2-Dichlorobenzene	< 312	ug/Kg		2/6/2016 00:15
1,3-Dichlorobenzene	< 312	ug/Kg		2/6/2016 00:15
1,4-Dichlorobenzene	< 312	ug/Kg		2/6/2016 00:15
2,4-Dinitrotoluene	< 312	ug/Kg		2/6/2016 00:15
2,6-Dinitrotoluene	< 312	ug/Kg		2/6/2016 00:15
2-Chloronaphthalene	< 312	ug/Kg		2/6/2016 00:15

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SS-3		
Lab Sample ID:	160439-08	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

2-Methylnapthalene	< 312	ug/Kg	2/6/2016	00:15
2-Nitroaniline	< 623	ug/Kg	2/6/2016	00:15
3,3'-Dichlorobenzidine	< 312	ug/Kg	2/6/2016	00:15
3-Nitroaniline	< 623	ug/Kg	2/6/2016	00:15
4-Bromophenyl phenyl ether	< 312	ug/Kg	2/6/2016	00:15
4-Chloroaniline	< 312	ug/Kg	2/6/2016	00:15
4-Chlorophenyl phenyl ether	< 312	ug/Kg	2/6/2016	00:15
4-Nitroaniline	< 623	ug/Kg	2/6/2016	00:15
Acenaphthene	< 312	ug/Kg	2/6/2016	00:15
Acenaphthylene	< 312	ug/Kg	2/6/2016	00:15
Acetophenone	< 312	ug/Kg	2/6/2016	00:15
Anthracene	< 312	ug/Kg	2/6/2016	00:15
Atrazine	< 312	ug/Kg	2/6/2016	00:15
Benzaldehyde	< 312	ug/Kg	2/6/2016	00:15
Benzo (a) anthracene	< 312	ug/Kg	2/6/2016	00:15
Benzo (a) pyrene	< 312	ug/Kg	2/6/2016	00:15
Benzo (b) fluoranthene	< 312	ug/Kg	2/6/2016	00:15
Benzo (g,h,i) perylene	< 312	ug/Kg	2/6/2016	00:15
Benzo (k) fluoranthene	< 312	ug/Kg	2/6/2016	00:15
Bis (2-chloroethoxy) methane	< 312	ug/Kg	2/6/2016	00:15
Bis (2-chloroethyl) ether	< 312	ug/Kg	2/6/2016	00:15
Bis (2-chloroisopropyl) ether	< 312	ug/Kg	2/6/2016	00:15
Bis (2-ethylhexyl) phthalate	< 312	ug/Kg	2/6/2016	00:15
Butylbenzylphthalate	< 312	ug/Kg	2/6/2016	00:15
Caprolactam	< 312	ug/Kg	2/6/2016	00:15
Carbazole	< 312	ug/Kg	2/6/2016	00:15
Chrysene	< 312	ug/Kg	2/6/2016	00:15
Dibenz (a,h) anthracene	< 312	ug/Kg	2/6/2016	00:15
Dibenzofuran	< 312	ug/Kg	2/6/2016	00:15
Diethyl phthalate	< 312	ug/Kg	2/6/2016	00:15
Dimethyl phthalate	< 623	ug/Kg	2/6/2016	00:15
Di-n-butyl phthalate	< 312	ug/Kg	2/6/2016	00:15

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-3
Lab Sample ID: 160439-08 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Di-n-octylphthalate	< 312	ug/Kg	2/6/2016	00:15
Fluoranthene	< 312	ug/Kg	2/6/2016	00:15
Fluorene	< 312	ug/Kg	2/6/2016	00:15
Hexachlorobenzene	< 312	ug/Kg	2/6/2016	00:15
Hexachlorobutadiene	< 312	ug/Kg	2/6/2016	00:15
Hexachlorocyclopentadiene	< 312	ug/Kg	2/6/2016	00:15
Hexachloroethane	< 312	ug/Kg	2/6/2016	00:15
Indeno (1,2,3-cd) pyrene	< 312	ug/Kg	2/6/2016	00:15
Isophorone	< 312	ug/Kg	2/6/2016	00:15
Naphthalene	< 312	ug/Kg	2/6/2016	00:15
Nitrobenzene	< 312	ug/Kg	2/6/2016	00:15
N-Nitroso-di-n-propylamine	< 312	ug/Kg	2/6/2016	00:15
N-Nitrosodiphenylamine	< 312	ug/Kg	2/6/2016	00:15
Phenanthrene	< 312	ug/Kg	2/6/2016	00:15
Pyrene	< 312	ug/Kg	2/6/2016	00:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2-Fluorobiphenyl	**55.5**	22 - 96.1		2/6/2016	00:15
Nitrobenzene-d5	**50.0**	11.6 - 83.3		2/6/2016	00:15
Terphenyl-d14	**81.4**	60.4 - 114		2/6/2016	00:15

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 2/5/2016
Data File: B09997.D

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	<1.75	ug/Kg		2/5/2016
4,4-DDE	<1.75	ug/Kg		2/5/2016
4,4-DDT	<3.28	ug/Kg		2/5/2016
Aldrin	<1.75	ug/Kg		2/5/2016
alpha-BHC	<0.730	ug/Kg		2/5/2016
beta-BHC	<1.75	ug/Kg		2/5/2016
cis-Chlordane	<2.19	ug/Kg		2/5/2016

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-3
Lab Sample ID: 160439-08 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

delta-BHC	<1.75	ug/Kg		2/5/2016
Dieldrin	<1.09	ug/Kg		2/5/2016
Endosulfan I	<1.75	ug/Kg		2/5/2016
Endosulfan II	<1.75	ug/Kg		2/5/2016
Endosulfan Sulfate	<0.730	ug/Kg		2/5/2016
Endrin	<0.730	ug/Kg		2/5/2016
Endrin Aldehyde	<2.19	ug/Kg		2/5/2016
Endrin Ketone	<1.75	ug/Kg		2/5/2016
gamma-BHC (Lindane)	<0.730	ug/Kg		2/5/2016
Heptachlor	<0.876	ug/Kg		2/5/2016
Heptachlor Epoxide	<3.28	ug/Kg		2/5/2016
Methoxychlor	<3.28	ug/Kg		2/5/2016
Toxaphene	<32.8	ug/Kg		2/5/2016
trans-Chlordane	<2.19	ug/Kg		2/5/2016

Method Reference(s): EPA 8081B
EPA 3510C
Subcontractor ELAP ID: 11148

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 5.61	ug/Kg		2/3/2016 21:20
1,1,2,2-Tetrachloroethane	< 5.61	ug/Kg		2/3/2016 21:20
1,1,2-Trichloroethane	< 5.61	ug/Kg		2/3/2016 21:20
1,1-Dichloroethane	< 5.61	ug/Kg		2/3/2016 21:20
1,1-Dichloroethene	< 5.61	ug/Kg		2/3/2016 21:20
1,2,3-Trichlorobenzene	< 14.0	ug/Kg		2/3/2016 21:20
1,2,4-Trichlorobenzene	< 14.0	ug/Kg		2/3/2016 21:20
1,2-Dibromo-3-Chloropropane	< 28.1	ug/Kg		2/3/2016 21:20
1,2-Dibromoethane	< 5.61	ug/Kg		2/3/2016 21:20
1,2-Dichlorobenzene	< 5.61	ug/Kg		2/3/2016 21:20
1,2-Dichloroethane	< 5.61	ug/Kg		2/3/2016 21:20
1,2-Dichloropropane	< 5.61	ug/Kg		2/3/2016 21:20
1,3-Dichlorobenzene	< 5.61	ug/Kg		2/3/2016 21:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier:	SS-3		
Lab Sample ID:	160439-08	**Date Sampled:**	2/1/2016
Matrix:	Soil	**Date Received:**	2/1/2016

1,4-Dichlorobenzene	< 5.61	ug/Kg	2/3/2016 21:20
1,4-dioxane	< 56.1	ug/Kg	2/3/2016 21:20
2-Butanone	< 28.1	ug/Kg	2/3/2016 21:20
2-Hexanone	< 14.0	ug/Kg	2/3/2016 21:20
4-Methyl-2-pentanone	< 14.0	ug/Kg	2/3/2016 21:20
Acetone	< 28.1	ug/Kg	2/3/2016 21:20
Benzene	< 5.61	ug/Kg	2/3/2016 21:20
Bromochloromethane	< 14.0	ug/Kg	2/3/2016 21:20
Bromodichloromethane	< 5.61	ug/Kg	2/3/2016 21:20
Bromoform	< 14.0	ug/Kg	2/3/2016 21:20
Bromomethane	< 5.61	ug/Kg	2/3/2016 21:20
Carbon disulfide	< 5.61	ug/Kg	2/3/2016 21:20
Carbon Tetrachloride	< 5.61	ug/Kg	2/3/2016 21:20
Chlorobenzene	< 5.61	ug/Kg	2/3/2016 21:20
Chloroethane	< 5.61	ug/Kg	2/3/2016 21:20
Chloroform	< 5.61	ug/Kg	2/3/2016 21:20
Chloromethane	< 5.61	ug/Kg	2/3/2016 21:20
cis-1,2-Dichloroethene	< 5.61	ug/Kg	2/3/2016 21:20
cis-1,3-Dichloropropene	< 5.61	ug/Kg	2/3/2016 21:20
Cyclohexane	< 28.1	ug/Kg	2/3/2016 21:20
Dibromochloromethane	< 5.61	ug/Kg	2/3/2016 21:20
Dichlorodifluoromethane	< 5.61	ug/Kg	2/3/2016 21:20
Ethylbenzene	< 5.61	ug/Kg	2/3/2016 21:20
Freon 113	< 5.61	ug/Kg	2/3/2016 21:20
Isopropylbenzene	< 5.61	ug/Kg	2/3/2016 21:20
m,p-Xylene	< 5.61	ug/Kg	2/3/2016 21:20
Methyl acetate	< 5.61	ug/Kg	2/3/2016 21:20
Methyl tert-butyl Ether	< 5.61	ug/Kg	2/3/2016 21:20
Methylcyclohexane	< 5.61	ug/Kg	2/3/2016 21:20
Methylene chloride	< 14.0	ug/Kg	2/3/2016 21:20
o-Xylene	< 5.61	ug/Kg	2/3/2016 21:20
Styrene	< 14.0	ug/Kg	2/3/2016 21:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 160439

Client: **Bergmann Associates**

Project Reference: 632 South Plymouth

Sample Identifier: SS-3
Lab Sample ID: 160439-08 **Date Sampled:** 2/1/2016
Matrix: Soil **Date Received:** 2/1/2016

Tetrachloroethene	< 5.61	ug/Kg	2/3/2016	21:20
Toluene	< 5.61	ug/Kg	2/3/2016	21:20
trans-1,2-Dichloroethene	< 5.61	ug/Kg	2/3/2016	21:20
trans-1,3-Dichloropropene	< 5.61	ug/Kg	2/3/2016	21:20
Trichloroethene	< 5.61	ug/Kg	2/3/2016	21:20
Trichlorofluoromethane	< 5.61	ug/Kg	2/3/2016	21:20
Vinyl chloride	< 5.61	ug/Kg	2/3/2016	21:20

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**111**	83 - 126		2/3/2016	21:20
4-Bromofluorobenzene	**90.0**	80.8 - 115		2/3/2016	21:20
Pentafluorobenzene	**93.6**	90.6 - 111		2/3/2016	21:20
Toluene-D8	**97.2**	89.2 - 109		2/3/2016	21:20

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

Data File: x29402.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.

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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

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	Bergmann Associates	CLIENT:	Bergmann Associates	160439
ADDRESS:	28 E. Main St / 200 First Federal Plaza	ADDRESS:	←	Quotation #:
CITY:	Rochester	STATE: NY	ZIP: 14614	CITY: ← STATE: ZIP:
PHONE:	585 232 5137 x 204	PHONE:	←	Email: mbarrus@bergmannpc.com
ATTN:	Megan Barrus	ATTN:	←	

PROJECT REFERENCE
632 South Plymouth

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

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260 VOC TCL	8270 SVOC TCL	TAL METALS	8081 Pest	8082 PCB	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	2/1/16	0900		X	SB-1 (12-13.5)	So	1	X	X	X			8260 / 8270 lists per S DeMeo per M Barrus KRH 2/1/16	01
2	2/1/16	0948		X	SB-2 (8-11)	So	1	X	X	X				02
3	2/1/16	1035		X	SB-3 (8-12)	So	1	X	X	X				03
4	2/1/16	1136		X	SB-4 (8-12)	So	1	X	X	X				04
5	2/1/16	1210		X	SB-5 (12-13.5)	So	1	X	X	X				05
6	2/1/16	1330		X	SS-1	So	1					X		06
7	2/1/16	1340		X	SS-2	So	1					X		07
8	2/1/16	1400		X	SS-3	So	2	X	X	X	X	X		08
9														
10														

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	X
Rush 2 day		Category B			
Rush 1 day					
Other please indicate:		Other please indicate:		Other EDD please indicate:	

Megan E. Barrus	2/1/16 1547	Sampled By / Date/Time
Megan E. Barrus	2/1/16 1547	Relinquished By / Date/Time
KRH	2/1/16 1550	Received By / Date/Time
	2/1/16 16:39	Received @ Lab By / Date/Time

Total Cost:

P.I.F.

9°C iced started in field 2/1/16 16:16

Chain of Custody Supplement

Client: Bergmann Associates **Completed by:** Glenn Pezzulo

Lab Project ID: 160439 **Date:** 2/1/16

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		X meth 5
Comments	9°C iced started in field		
Sufficient Sample Quantity	X		
Comments			

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

CHAIN OF CUSTODY

L1607783 11148

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	179 Lake Avenue	ADDRESS:			
CITY: Rochester STATE: NY ZIP: 14608		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS) STD OTHER	
PHONE: FAX:		PHONE: FAX:		1 2 3 X 5	
PROJECT NAME/SITE NAME:		ATTN: Kate Hansen	ATTN: Meridith Dillman		
		COMMENTS: Please email results to khansen@paradigmenv.com and reporting@paradigmenv.com		Date Due: 2/10/16	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Pesticides										REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	2/1/16	14:00		X	160439-08	So.	1	X															
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments: 2.8°C per Sub Lab		

JSD 2/9/2016

Client

Sampled By	Date/Time	2/2/16 16:00
Relinquished By	Date/Time	2/2/16 1700
Received By	Date/Time	2/2/16
Received By	Date/Time	2/3/16 0010
Received @ Lab By	Date/Time	

Total Cost:

P.I.F.