General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901

Engineers • Consultants • Inspectors

608-742-2169 (Office)
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gec@generalengineering.net
www.generalengineering.net

October 25, 2019

Nick Eberle (email)
Wisconsin Department of Agriculture Trade and Consumer Protection
Nicholas.Eberle@wisconsin.gov

RE: Underground Storage Tank Site Assessment
Madison Pantry
2022 Fordem Ave
Madison, Dane County, Wisconsin

Dear Mr. Eberle:

General Engineering Company has been retained by Schaper Excavating and Petroleum to perform a tank system site assessment (TSSA) for the removal of three underground storage tanks (USTs), associated product lines and dispensers, from the property located at 2022 Fordem Ave, Madison, in Dane County, Wisconsin. The three USTs consisting of two 8,000-gallon, and one 10,000-gallon in capacity, all containing unleaded gasoline.

The property is situated on the northwest corner of the intersection of Fordem Avenue and Fordem Court in the city of Madison, Wisconsin. The property was occupied by a gasoline station and convenience store. The main structure was located at the northwest portion of the property. The USTs and dispensers were located just east of the convenience store structure on the eastern portion of the property. The two dispensers were located above the USTs. A Regional Site Location Map, and Site Plan Map, are included in Attachment B.

Contractor/Excavator and Cleaner Remover:

Schaper Excavating and Petroleum, LLC
W4396 County Hwy E
Pardeeville, WI 53954

Tank Site Assessor:

Beth Erdman (467899)
General Engineering Company
916 Silver Lake Drive
Portage, WI 53901

Underground Storage Tank Site Assessment
Madison Pantry
Madison, Dane County, Wisconsin

Tank Removal/Closure:

On October 8, 2019, General Engineering Company performed an underground storage tank system site assessment for the removal of three USTs, two dispensers and associated piping. The product lines extended from the top of the tanks to the dispensers, which were located above the USTs. As the result of the lines and dispensers being located above the ASTs, no dispenser or line samples were collected. Water was present in the bottom of the excavation at a depth of approximately 6.5 to 7 feet below the ground surface. Due to the presence of groundwater, bottom soil samples were not collected, or required according to the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) guidance for tank site assessments. No odor or sheen was obvious on the groundwater.

Eleven soil samples were collected from the sidewalls around the UST excavation. Soil samples were submitted for laboratory analysis of petroleum volatile organic compounds (PVOC) and naphthalene. Low PVOC concentrations of trimethylbenzenes in soil sample SS-4, and naphthalene and trimethylbenzenes in soil sample SS-5 were detected along the western wall of the excavation. These concentrations were well below the Wisconsin Administrative Code (WAC) NR 720 soil to groundwater residual contaminant levels (RCLs). No PVOC or naphthalene compounds were detected in the remaining standards above the laboratory limit of detection. A map identifying the TSSA soil sample locations is included in Attachment B. Site photographs are included in Attachment C. A Soil Analytical Results Table, summarizing the soil samples analytical results from the TSSA are included in Attachment D.

Soil/Groundwater:

Native soils at the site to the bottom of the excavation were primarily brown/tan silty clay with gravel and cobbles. Groundwater was present in the bottom of the excavation. No obvious sheen or indication of a release was present on the groundwater.

Historic Release:

A historic release is documented at the site on the Wisconsin Department of Natural Resources (WDNR) BRRTS on the Web database. Open Pantry (BRRTS# 03-13-000051) was historically investigated and closed by the WDNR May 5, 2002, with residual contamination documented at the site. It is likely the low PVOC and naphthalene concentrations detected in the soil samples from this tank site assessment are associated with the residual petroleum contamination left in place at the time of this leaking underground storage tank (LUST) activity in May 2002.

Conclusions:

A tank site assessment including eleven soil samples was performed during the removal of three USTs and two dispensers at the Madison Pantry property in Madison, Dane County, Wisconsin. Low PVOC and naphthalene concentrations were detected from soil samples collected along the western wall of the excavation. Analytical results from the soil samples did not contain PVOC or naphthalene compounds above the WAC NR 720 RCLs. The low concentrations detected from the site assessment samples are likely from residual contamination from the LUST activity closed in 2002. Therefore, no additional investigation appears warranted at this time.

Underground Storage Tank Site Assessment
Madison Pantry
Madison, Dane County, Wisconsin

Please feel free to contact me if you have any further questions, or if additional information is needed.

Respectfully Submitted,

GENERAL ENGINEERING COMPANY

Beth A. Erdman

Beth Erdman
Environmental Project Manager

Lynn M. Bradley

Lynn M. Bradley
Environmental Project Manager

Attachments:

A – Tank System Service and Closure Assessment Form Part B
B – Figures
C – Photographs
D – Soil Analytical Table, Analytical Results and Chain of Custody Documentation

c: Schaper Excavating (email)
Wendy Weihemuller, PA, WDNR, 3911 Fish Hatchery Road, Madison, WI 53711

ATTCHMENT A

TANK SYSTEM CLOSURE ASSESSMENT

PART B

TR-WM-140 (7/19) Formerly ERS-8951

Part B – To be completed by environmental professional - Submit *original* Part B to the WDNR along with a *copy* of Part A

I. TANK-SYSTEM SITE ASSESSMENT (TSSA)

SITE NAME - ***Note: SITE NAME and address MUST MATCH with Part A Section 1.***

Madison Pantry

SITE ADDRESS (Not PO Box)	☐ CITY ☒ TOWN ☐ VILLAGE	STATE	ZIP
2022 Fordem Ave	Madison	WI	53704

To determine if a TSSA is required, see ATCP 93 and section II part B of *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.*

If a TSSA is required, then follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS*

1. Site Information

a. Has there been a previously documented release at this site? ☒ Y ☐ N

If yes, provide the DATCP # _____ or DNR BRRT's # 03-13-000051

b. Number of active tanks at facility prior to completion of current services: USTs 3 ASTs _____

(**NOTE 1**: *Do not include previously closed systems or system components.*)

c. Excavation/trench dimensions (in feet). (Photos must be provided.)

EXCAVATION/TRENCH #	LENGTH	WIDTH	DEPTH
UST	37 ft	35 ft	12 ft

2. Visual Excavation/Trench Inspection (Photos must be provided for "Yes" responses, except item b.)

Do any of the following conditions exist in or about the excavation(s)?

a. Stained soils: ☐ Yes ☒ No b. Petroleum odor: ☐ Yes ☐ No c. Water In excavation/trench: ☒ Yes ☐ No

d. Free product in the excavation/trench: ☐ Yes ☒ No e. Sheen or free product on water: ☐ Yes ☒ No

3. Geology/Hydrogeology

a. Depth to groundwater 6.5-7 feet b. Indicate type of geology[2] Br/Tan Silty Clay with Gravel/Cobbles

4. Receptors

a. Water supply well(s) within 250 feet of the facility? ☐ Yes ☒ No If yes, specify: _____

b. Surface water(s) within 1000 feet of the facility? ☐ Yes ☒ No If yes, specify: _____

5. Sampling

a. Follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.*

b. Complete Tables 1 and 2 as appropriate. (Attach chain-of-custody and laboratory analytical reports.)

c. Attach a detailed map of site features and sample locations.

J. NOTE RELEVANT OBSERVATIONS, SPECIFIC PROBLEMS OR CONCERNS BELOW

Depth to water was present at approximately 6.5-7 feet below ground surface (bgs). Excavation extended to approximately 12 feet bgs, so no bottom samples were collected. No evidence of petroleum or petroleum odors were observed. The dispensers were located above the tanks in the pea gravel backfill with no native soil present between the dispensers and the tanks, so no dispenser samples could be collected.

TABLE 1 SOIL FIELD SCREENING & GRO/DRO LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
SS-1	NE Sidewall	☒	☐	☐	☐	6' - Side of Tank	0.4	NA	NA
SS-2	N Center Sidewall	☒	☐	☐	☐	6' Side of Tank	0.5	NA	NA
SS-3	NW Sidewall	☒	☐	☐	☐	6' Side of Tank	1.8	NA	NA
SS-4	NW End	☒	☐	☐	☐	6.5' End of Tank	0.5	NA	NA
SS-5	W Center End	☒	☐	☐	☐	6.5 End of Tank	0.8	NA	NA
SS-6	S Center Sidewall	☒	☐	☐	☐	6.5 Side of Tank	0.5	NA	NA
SS-7	E Center End	☒	☐	☐	☐	6.5' End of Tank	0.9	NA	NA
SS-8	NE End	☒	☐	☐	☐	6.5' End of Tank	1.8	NA	NA
SS-9	SE Sidewall	☒	☐	☐	☐	6.5' Side of Tank	0.9	NA	NA
SS-10	SE End	☒	☐	☐	☐	6.5' End of Tank	2.3	NA	NA
SS-11	SW Sidewall	☒	☐	☐	☐	6.5' Side of tank	1.3	NA	NA
		☐	☐	☐	☐				
		☐	☐	☐	☐				
	Soil: BR/Tan Si Clay w Gr/Cobbles	☐	☐	☐	☐				

TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SS-1	<25	<25	<25	<25	<50	<75	<25
SS-2	<25	<25	<25	<25	<50	<75	<25
SS-3	<25	<25	<25	<25	<50	<75	<25
SS-4	<25	<25	<25	<25	109	<75	<25
SS-5	<25	<25	<25	<25	65J	75J	36J
SS-6	<25	<25	<25	<25	<50	<75	<25
SS-7	<25	<25	<25	<25	<50	<75	<25
SS-8	<25	<25	<25	<25	<50	<75	<25
SS-9	<25	<25	<25	<25	<50	<75	<25
SS-10	<25	<25	<25	<25	<50	<75	<25
SS-11	<25	<25	<25	<25	<50	<75	<25

K. TANK-SYSTEM SITE ASSESSMENT INFORMATION

☒ As a tank-system site assessor certified under Wis. Admin. Code section SPS 305.83, it is my opinion that there is no indication of a release of a regulated substance to the environment.

☐ Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section ATCP 93.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter ATCP 93 shall immediately report any release of a regulated substance to the Wisconsin Department of Natural Resources. Failure to do so may result in forfeitures of a minimum of $10 and a maximum of $5000 for each violation under Wis. Stats. Section 168.26 (5). Each day of continued violation and each tank are treated as separate offenses.

Beth Erdman	Beth M Erdman	467899
TANK-SYSTEM SITE ASSESSOR NAME (PRINT):	TANK-SYSTEM SITE ASSESSOR SIGNATURE	CERTIFICATION NO.

(608) 697 - 8004	10/22/2019	General Engineering Company
TANK-SYSTEM SITE ASSESSOR TELEPHONE NUMBER	DATE SIGNED	COMPANY NAME

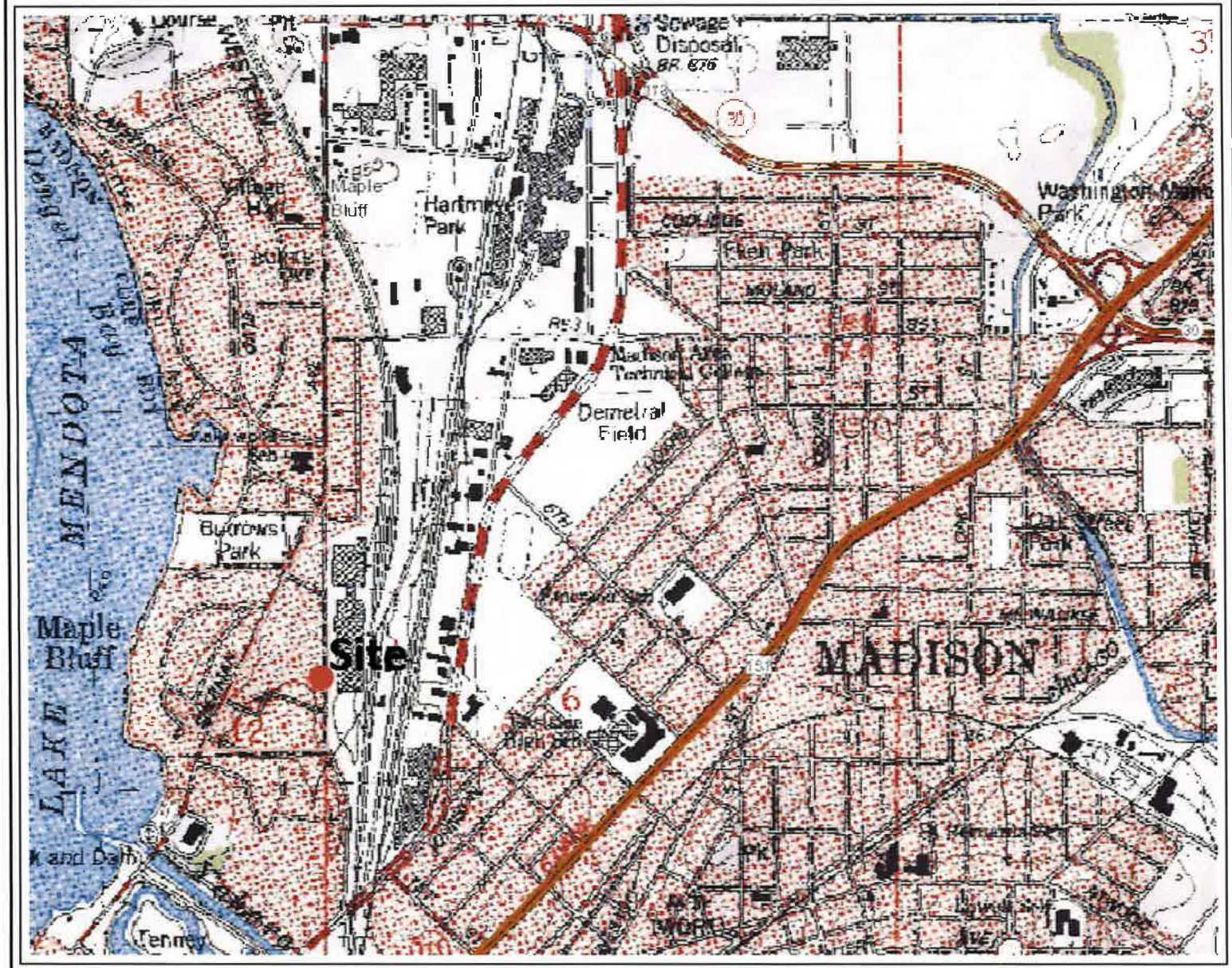
This document can be made available in alternate formats to individuals with disabilities upon request.

Distribution: DATCP DNR Inspector Contractor Owner

ATTACHMENT B

SITE FIGURES/MAPS

Regional Site Location Map



Legend

0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

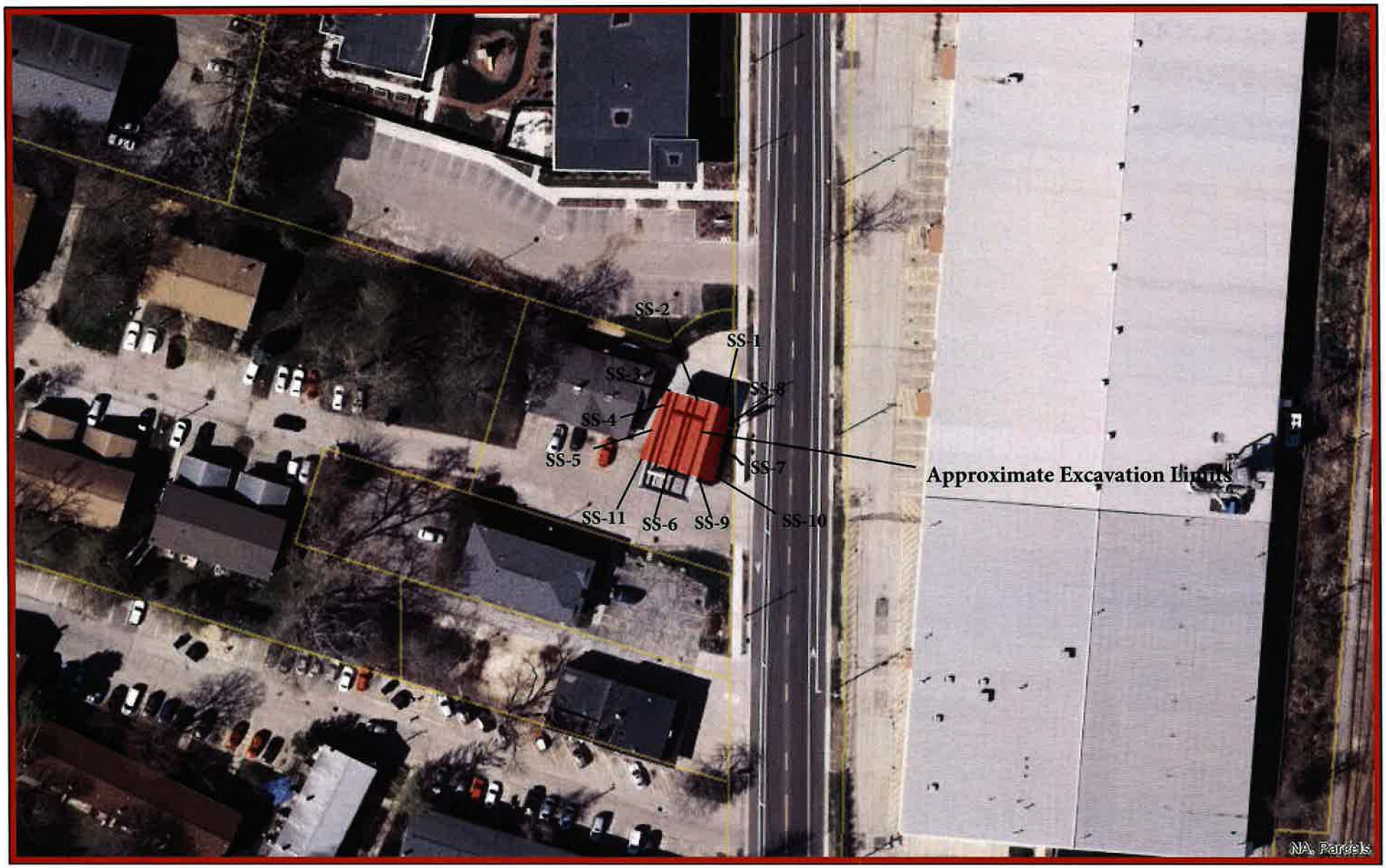
1: 15,840

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/org/legal/

Note: Not all sites are mapped.

Notes

Sample Location Map



October 22, 2019

Parcels

0 50 100 200 Feet

N

Site Plan Map

October 22, 2019

Parcels

0 50 100 200 Feet

N

ATTACHMENT C

SITE PHOTOGRAPHS

Photograph of the 1st (northern) 8,000-gallon UL gasoline UST. Note water in the excavation.

Photograph of 2nd 8,000-gallon UL Gasoline UST following removal of the 1st. View looking east.

Photo of the 10,000-gallon UL Gasoline UST being removed. View looking northwest

Photo of the 1st (northern) 8,000-gallon UST following removal.

Photograph of the 2nd (center) 8,000-gallon UST being removed

Excavation following removal of the two, 8,000-gallon ASTs.

ATTACHMENT D

ANALYTICAL RESULTS AND CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

Synergy
Environmental Lab, Inc.

www.synergy-lab.net
1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • mrsynergy@wi.twcbc.com

Chain # No 41375

Page 1 of 1

Sample Handling Request

____ Rush Analysis Date Required: ______
(Rushes accepted only with prior authorization)

____ Normal Turn Around

Lab I.D. #	
QUOTE # :	
Project #:	2-0119-47L
Sampler: (signature)	Beth Erdman
Project (Name / Location):	Schaper - Madison Fordem Ave

Reports To:	Lynn & Beth	Invoice To:	
Company	GEC	Company	Same
Address	916 Silver Lake Dr	Address	
City State Zip	Portage, WI 53901	City State Zip	
Phone	608-697-8004	Phone	
Email	Beth & Lynn	Email	

Analysis Requested: DRO (Mod DRO Sep 95), GRO (Mod GRO Sep 95), LEAD, NITRATE/NITRITE, OIL & GREASE, PAH (EPA 8270), PCB, PVOC (EPA 8021), PVOC + NAPHTHALENE, SULFATE, TOTAL SUSPENDED SOLIDS, VOC DW (EPA 524.2), VOC (EPA 8260), VOC AIR (TO - 15), 8-RCRA METALS

Other Analysis: PID/FID

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	PVOC + NAPHTHALENE
5036928A	SS-1	10/8	12:18	N	1	Soil	MEOH	X
B	SS-2	↓	12:24	↓	↓	↓	↓	↓
C	SS-3	↓	12:55	↓	↓	↓	↓	↓
D	SS-4	↓	2:13	↓	↓	↓	↓	↓
E	SS-5	↓	3:48	↓	↓	↓	↓	↓
F	SS-6	↓	4:15	↓	↓	↓	↓	↓
G	SS-7	↓	4:18	↓	↓	↓	↓	↓
H	SS-8	↓	4:20	↓	↓	↓	↓	↓
I	SS-9	↓	4:25	↓	↓	↓	↓	↓
J	SS-10	↓	4:28	↓	↓	↓	↓	↓
K	SS-11	↓	4:30	↓	↓	↓	↓	↓

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Email Results to Beth & Lynn

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Client

Temp. of Temp. Blank: ______ °C On Ice: X

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Beth H Erdman	4:37	10/9/19			

Received In Laboratory By: [signature] Time: 8:00 Date: 10/9/19

Synergy Environmental Lab, INC

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

LYNN BRADLEY
GENERAL ENGINEERING
916 SILVER LAKE DRIVE
PORTAGE. WI 53901

Report Date *18-Oct-19*

Project Name SCHAPER
Proiect #

Invoice # E36928

Lab Code 5036928A
Sample ID SS-1
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.8	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Project Name SCHAPER
Project #

Invoice # E36928

Lab Code 5036928B
Sample ID SS-2
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.0	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Lab Code 5036928C
Sample ID SS-3
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.2	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Project Name SCHAPER **Invoice #** E36928
Project #

Lab Code 5036928D
Sample ID SS-4
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.2	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	0.064	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	0.045	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Lab Code 5036928E
Sample ID SS-5
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.1	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	0.036	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	0.037 "J"	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	0.0251 "J"	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Project Name SCHAPER
Project #

Invoice # E36928

Lab Code 5036928F
Sample ID SS-6
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.5	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Lab Code 5036928G
Sample ID SS-7
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.6	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Project Name SCHAPER **Invoice #** E36928
Project #

Lab Code 5036928H
Sample ID SS-8
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.0	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/17/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/17/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/17/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/17/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/17/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/17/2019	CJR	1

Lab Code 5036928I
Sample ID SS-9
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.1	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/18/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/18/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/18/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/18/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/18/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/18/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/18/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/18/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/18/2019	CJR	1

Project Name SCHAPER **Invoice #** E36928
Project #

Lab Code 5036928J
Sample ID SS-10
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.4	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/18/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/18/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/18/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/18/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/18/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/18/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/18/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/18/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/18/2019	CJR	1

Lab Code 5036928K
Sample ID SS-11
Sample Matrix Soil
Sample Date 10/8/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	81.0	%			1	5021		10/9/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		10/18/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		10/18/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		10/18/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		10/18/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		10/18/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		10/18/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		10/18/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		10/18/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		10/18/2019	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature