

# Post-Closure Modification with Materials Management Plan

Former Appleby's Auto Salvage  
W2578 Holland Lima Road  
Oostburg, Wisconsin  
BRRTS #03-60-305128

Prepared for:

Harter's Lakeside Disposal LLC  
W2578 Holland Lima Road  
Oostburg, Wisconsin 53070  
920-552-5423

**SCS ENGINEERS**

25221142.00 | April 25, 2022

2830 Dairy Drive  
Madison, WI 53718-6751  
608-224-2830

April 25, 2022  
File No. 25221142.00

Mr. Keld Lauridsen  
Wisconsin Department of Natural Resources  
2984 Shawano Avenue  
Green Bay, WI 54313

Subject: Post-Closure Modification with Materials Management Plan  
Former Appleby's Auto Salvage  
W2578 Holland Lima Road  
Oostburg, WI  
BRRTS Activity #03-60-305128

Dear Mr. Lauridsen:

On behalf of Harter's Lakeside Disposal LLC (Harter's), SCS Engineers (SCS) has prepared this letter to notify the Wisconsin Department of Natural Resources (WDNR) of planned redevelopment activities including building construction and expansion work at the former Appleby's Auto Salvage, which is the site of a closed leaking underground storage tank (LUST) case with continuing obligations (BRRTS #03-60-305128). Harter's is proposing to redevelop the site as a solid waste transfer station. This submittal also includes a Materials Management Plan (MMP) to appropriately address risks associated with vapor and residual groundwater and soil contamination during and after site redevelopment. If contaminated soil is encountered during redevelopment construction activities, it will be disposed at a licensed solid waste landfill; therefore, approval of the MMP is not required and is provided for reference only.

## 1.0 SITE ENVIRONMENTAL CONDITIONS

SCS reviewed the case closure request and case closure letter for the closed LUST case at the site. A summary of the investigation and remediation related to the petroleum LUST case follows:

- A 300-gallon leaded and unleaded gasoline UST was removed in 1992.
- Sampling completed in 1998 revealed the presence of petroleum impacts to soil and groundwater in the vicinity of the former tank.
- Following notification to WDNR of the identified impacts, additional soil sampling and installation of a monitoring well network with 12 monitoring wells and two piezometers were completed to further evaluate the release. Analytical results are presented in Attachment A of the case closure request. Soil impacts were delineated as depicted on Figure B.2.a. of the case closure request. Groundwater impacts were delineated to the extent shown on Figure B.3.b. of the case closure request.
- A remedial excavation was completed in 2008 to remove the source area soil with the most elevated petroleum hydrocarbon concentrations. Confirmation sampling after the excavation was completed indicated that soil with residual petroleum hydrocarbon



concentrations exceeding groundwater pathway Residual Contaminant Levels (RCLs) remains beyond the limits of the completed excavation, as shown on Figure B.2.b. of the case closure request. Soil exceeding direct contact RCLs was removed during remedial excavation.

- Groundwater monitoring continued until 2015 to document petroleum hydrocarbon concentration trends and to assess plume stability. Review of Table A.1. of the case closure request indicates that petroleum hydrocarbon concentrations have decreased significantly since groundwater monitoring began in 2005.
- Case closure was requested in 2017 after groundwater monitoring results indicated decreasing concentrations. Case closure was granted by WDNR with continuing obligations later in 2017.

## 1.1 CONTINUING OBLIGATIONS

The continuing obligations stipulated in the May 24, 2017, case closure letter are summarized as follows:

- Groundwater impacts are present at the site in excess of NR 140 Enforcement Standards (ESs). New water supply wells must be approved by WDNR prior to construction.
- Residual soil impacts exceeding NR 720 RCLs remain in the area of soil samples S-5, S-7, S-9, S-19, S-20, S-22, and S28. Soil in these areas must be managed appropriately if it is excavated or otherwise disturbed.
- Due to residual petroleum impacts to site soil and groundwater, vapor intrusion must be evaluated and mitigated (if warranted) if buildings are to be constructed over or near areas of impacted soil and groundwater.
- Construction-related dewatering permits should consider the potential for petroleum impacts in discharge water.
- Monitoring well MW-3 could not be located and has not been properly abandoned in accordance with NR 141. If the monitoring well is located, the current owner is responsible for filling and sealing the well and notifying WDNR.

## 2.0 REDEVELOPMENT SUMMARY

The former Appleby's Auto Salvage facility was recently purchased by Harter's with the intent of repurposing the site for use as a solid waste transfer station. Redevelopment will generally include expansion of the existing building near the center of the site into a new Garage and Storage Area, and potential future expansion of the existing building to the west into a new Office area. The new Office area building expansion may occur in 2023 or 2024, or may not be completed based on Harter's plans at other facilities. The redevelopment plan also includes a new Transfer Station Building and a Hoop Building on the western portion of the site, a truck scale in the west-central portion of the site, an underground septic tank, and three storm water management basins. Construction is planned to begin in April 2022. The attached **Figure 1** shows the redevelopment plan with site features relative to the locations of residual soil and groundwater impacts.

### **3.0 MATERIALS MANAGEMENT**

The site redevelopment plan requires soil excavation for footings and foundations of buildings and a truck scale, storm water basins, utilities, and general site grading. Excavation for the southeast portion of the truck scale, western portion of the central site-building foundation, and southwest storm water basin are most likely to generate petroleum-impacted soil, based on the delineated extent of residual impacts shown on Figure B.2.b. of the case closure request.

Impacted groundwater is present beginning at depths of approximately 6 feet below ground surface (bgs). The proposed buildings do not have basements, and therefore it is unlikely that excavation will extend beyond 5 feet bgs.

Management related to impacted soil, groundwater, and vapor is summarized below.

### **3.1 SOIL MANAGEMENT**

Two classes of soil have been identified for management during redevelopment at the site. Definitions of each material class and a description of the management approach for each are provided below. Soil classes will be determined based on the defined extents of residual soil impacts presented on Figure B.2.b. of the case closure request and based on field observations such as staining and odor.

#### **3.1.1 Class I Soil Management**

Class I soils are primarily clay and possibly remedial excavation backfill (assumed to be sand and/or gravel) in contact with impacted groundwater. Class I soils are present within the two regions shown on **Figure 1** but also include any soil excavated during redevelopment construction activities and exhibiting petroleum staining or odor that may be present beyond these areas.

Class I soil will be transported off site by a licensed hauler for disposal at a licensed landfill facility. Preliminary plans are to dispose of material at GFL's Hickory Meadows Landfill in Hilbert, WI. Stockpiling of Class I soil will be minimized to the extent possible. If temporary stockpiling is necessary, Class I soil will be placed on tarps and covered to prevent infiltration and leaching of petroleum hydrocarbons.

#### **3.1.2 Class II Soil Management**

Class II soils are similar in character to Class I soils, but are not impacted with petroleum hydrocarbons. Class II soils are located beyond the limits of the two regions of delineated residual soil impacts and do not exhibit petroleum odor or other signs of impact when screened during excavation. If structurally suitable, Class II soil will be reused on site or hauled off site with no restrictions.

### **3.2 GROUNDWATER MANAGEMENT**

Dewatering is not anticipated based on the site soils and lack of dewatering needed during the past excavation activities at the site. If dewatering is necessary in areas of residual groundwater contamination, Harter's will obtain a general permit for Discharge of Contaminated Groundwater

from Remedial Action Operations, or containerize and haul contaminated water to a wastewater treatment plant.

In addition to managing impacted water directly, the southwest pond bottom and sideslopes will be lined with 2 feet of compacted clay soil meeting the Type A liner specifications of WDNR's Wet Detention Pond Technical Standard 1001 for sites with high potential for groundwater contamination.

### 3.3 VAPOR

#### 3.3.1 Vapor Intrusion Screening

SCS reviewed the degree and extent of residual soil and groundwater impacts along with locations of proposed structures to evaluate potential vapor intrusion risk at the site. A vapor intrusion screening was completed following the approach described in WDNR guidance document RR-800. Each criterion from RR-800 is presented below with SCS's screening determination provided in *italics* for each criterion:

- **Non-aqueous Phase Liquid (NAPL): Building has less than 15-foot vertical separation or 30-foot horizontal separation from NAPL.** *According to the case closure request, no NAPL has been detected at the site. Vapor investigation is not recommended based on this criterion.*
- **Groundwater (below foundation): Building has less than 5-foot vertical separation from groundwater with benzene > 1 mg/L (1,000 µg/L).** *Review of Table A.1 of the case closure request indicates that the most recent analytical results for all site monitoring wells are less than 1,000 µg/L. In addition, groundwater levels are typically more than 5 feet bgs. Vapor investigation is not recommended based on this criterion.*
- **Groundwater (contacts foundation): Groundwater with concentrations above NR 140 Preventive Action Limits (PALs) has entered or is in contact with the building's foundation.** *The site buildings do not and will not have basements, and thus have only shallow foundations. Groundwater is typically found below 5 feet bgs at the site, suggesting that groundwater contacting a building foundation is unlikely. Vapor investigation is not recommended based on this criterion.*
- **Soil: Building has less than 5-foot vertical and horizontal separation distance from petroleum-contaminated soil with the potential for off-gassing.** *Review of Table A.3. and Figure B.2.b. of the case closure request indicates that all soil samples representing residual soil impacts are located below 5 feet bgs and therefore are also located more than 5 feet horizontally. Vapor investigation is not recommended based on this criterion.*
- **Preferential Pathway: Petroleum vapors are present in utilities that transect a petroleum source area.** *The petroleum source (leaking gasoline UST) and surrounding soil have been removed. Vapor investigation is not recommended based on this criterion.*

- **Odors: Petroleum Odors are present in building near petroleum source area.** *The petroleum source (leaking gasoline UST) and surrounding soil have been removed. Vapor investigation is not recommended based on this criterion. In the unlikely event that odors are reported by building occupants in the future, vapor investigation should be conducted.*

### 3.3.2 Vapor Sampling

Although the vapor screening did not indicate the need to complete a vapor investigation, sub-slab sampling within the existing central site-building was performed as a precaution and to further evaluate potential vapor intrusion.

On March 15, 2022, two sub-slab vapor ports (SS-1 and SS-2) were installed near the residual soil and groundwater impacts, as shown on **Figure 1**. Sample ports and sampling equipment were tested for leaks prior to sampling. A sample was drawn from each port using laboratory-supplied Summa canisters. Samples were submitted with completed chain-of-custody documents to Pace Analytical laboratory in Minneapolis, Minnesota, for analysis of petroleum VOCs (PVOCs), naphthalene, and 1,2-dichloroethane (1,2-DCA). Laboratory analytical results are provided in **Attachment A**.

Laboratory analytical results (**Table 1**) were compared to Wisconsin Vapor Risk Screening Levels (VRSLs), which were calculated using the United States Environmental Protection Agency Vapor Intrusion Screening Level (VISL) calculator. No exceedances of VRSLs were reported, which is further evidence that vapor intrusion risk is low, as indicated by screening.

Based on screening and additional precautionary sampling, SCS recommends that no additional vapor sampling be completed at the site and that vapor mitigation be considered optional and not a requirement of the requested post-closure modification.

## 4.0 CLOSING

SCS and Harter's request written approval to proceed with the proposed building construction/expansion, which will comply with continuing obligations as defined in the May 24, 2017, case closure letter. A fee for review of this Post-Closure Modification (\$1,050) and a database fee (\$350) will be mailed to WDNR by Harter's. Harter's will follow the MMP presented in this document to manage contaminated soil encountered during construction. Upon completion of the redevelopment, a summary of materials management activities along with photographs and figures of updated site conditions will be submitted to WDNR.

Sincerely,



Jacob Krause, PG  
Hydrogeologist  
SCS Engineers



Robert Langdon  
Senior Project Manager  
SCS Engineers

Mr. Keld Lauridsen

April 25, 2022

Page 6

cc: Michael Thun – Harter's  
Jared Omernik – SCS Engineers

Encl. Table 1 – Sub-Slab Vapor Analytical Results Summary  
Figure 1 – Proposed Facility Site Plan with Residual Soil and Groundwater Contamination  
Attachment A – Sub-Slab Vapor Laboratory Report

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Table 1

Sub-Slab Vapor Analytical Results Summary



**Table 1. Sub-Slab Vapor Analytical Results Summary**  
**Harter's Waste Disposal - Oostburg, WI/ SCS Engineers Project #25221142.00**

(Results are in µg/m<sup>3</sup>)

Sample	Date	Benzene	1,2-Dichloroethane (1,2-DCA)	Ethylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m-Xylene & p-Xylene	o-Xylene
CAS #	--	71-43-2	107-06-2	100-41-4	1634-04-4	91-20-3	103-65-1	108-88-3	526-73-8	95-63-6	108-67-8	179601-23-1	95-47-7
SS-1	3/15/2022	<b>3.1</b>	<0.33	2.5	<0.22	<3.7	1.5 J	7.9	1.4 J	3.6	1.5 J	7.0	2.7
SS-2	3/15/2022	<b>4.5</b>	<0.35	3.3	<0.23	5.0	1.6 J	11.9	1.4 J	3.5	1.6 J	8.5	4.6
Industrial Sub-Slab Vapor Risk Screening Level		1,600	470	4,900	47,000	360	440,000	2,200,000	26,000	26,000	26,000	44,000	44,000

Abbreviations:

µg/m<sup>3</sup> = micrograms per cubic meter of air      CAS # = Chemical Abstracts Service Number

Notes:

1. Samples were collected in 6-liter summa canisters over 30-minute period and analyzed using the US EPA TO-15 analytical method.
2. Sub-Slab Vapor Risk Screening Levels (VRSLs) calculated using US EPA Vapor Intrusion Screening Level (VISL) calculator.  
 Calculation performed March 17, 2022 assuming Commercial setting with Hazard Quotient of 1, Target Risk of 10<sup>-5</sup>, and Attenuation Factor of 0.01.
3. **Bold+underlined** values exceed Industrial sub-slab VRSLs.

Laboratory Notes/Qualifiers:

J = Estimated concentration at or above the LOD and below the LOQ.

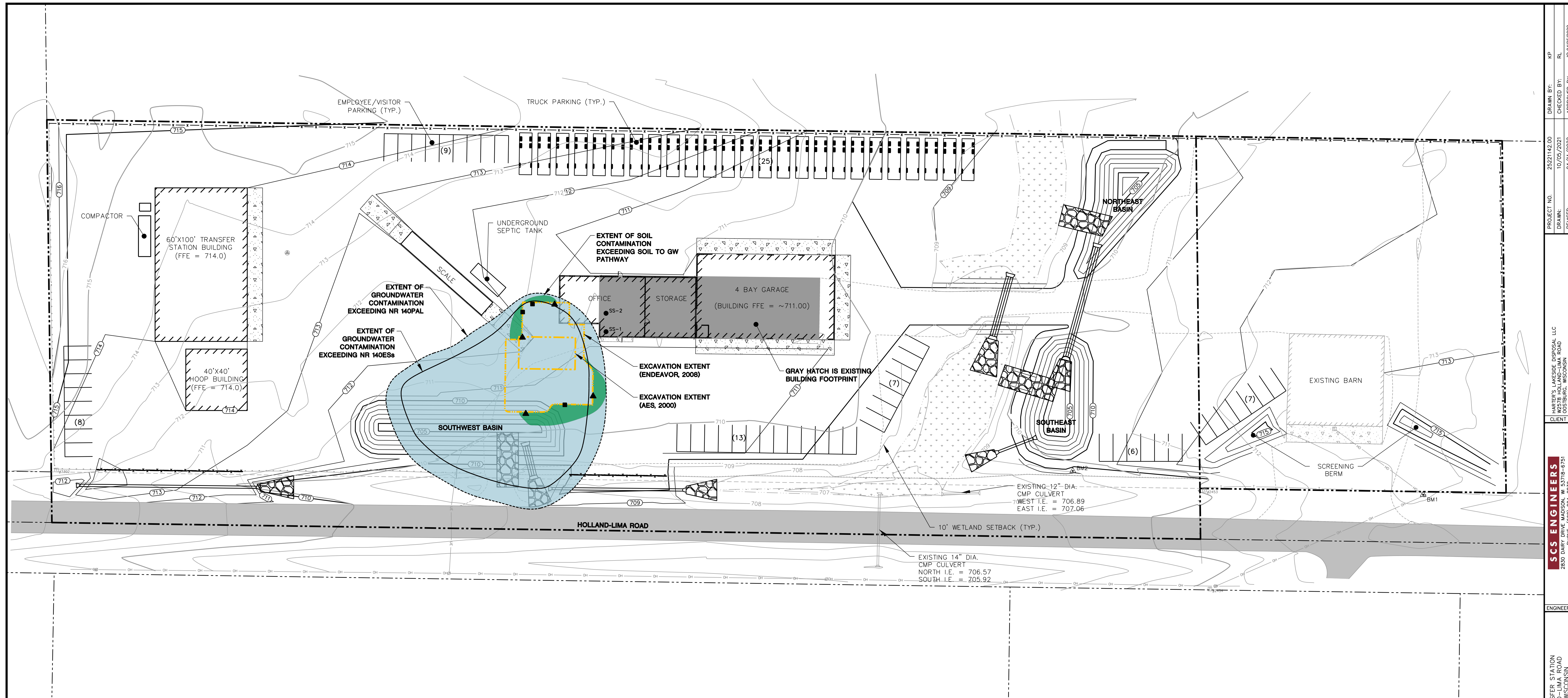
Created by:	REL	Date:	3/25/2022
Last Rev by:	REL	Date:	3/25/2022
Checked by:	LMH	Date:	3/29/2022
Proj Mgr QA/QC:	REL	Date:	3/30/2022

I:\25221142.00\Deliverables\MMP and PCM\[Table 1\_Sub-Slab\_Vapor\_Analytical Results Summary.xlsx]Vapor Intrusion



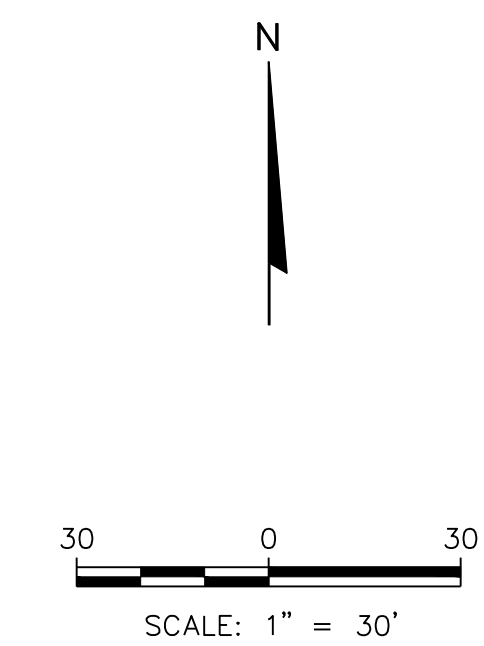
Figure 1

Proposed Facility Site Plan with  
Residual Soil and Groundwater Contamination



LEGEND	
--- (dashed line)	PROPERTY LINE (SUBJECT PROPERTY)
---	PROPERTY LINE
--- (solid line)	EXISTING GRADE (5' CONTOUR)
--- (solid line)	EXISTING GRADE (1' CONTOUR)
---	EXISTING PAVED ROAD
---	EXISTING EDGE OF GRAVEL
---	EXISTING METAL PRIVACY FENCE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING BURIED TELEPHONE
---	EXISTING BURIED ELECTRIC
---	EXISTING TELEPHONE PEDESTAL
---	EXISTING ELECTRIC METER
---	EXISTING POWER POLE
---	EXISTING CORRUGATED METAL CULVERT
---	EXISTING POTABLE WELL
---	BENCHMARK
---	EXISTING BUILDING
---	DELINEATED WETLANDS
---	EXISTING CONCRETE
---	PROPOSED GRADE (5' CONTOUR)
---	PROPOSED GRADE (1' CONTOUR)
---	PROPOSED CULVERT
---	PROPOSED BUILDING/BUILDING ADDITION
---	PROPOSED CONCRETE
---	PROPOSED FENCE
---	PROPOSED GATE
---	PROPOSED RIPRAP
▲	IN-PLACE SOIL SAMPLE WITH <700 µg/kg BENZENE (SEE NOTE 5)
■	IN-PLACE SOIL SAMPLE WITH >700 µg/kg BENZENE (SEE NOTE 5)
●	SUB-SLAB VAPOR SAMPLE POINT (SEE NOTE 6)

- NOTES:
- EXISTING CONDITIONS BASED ON SURVEY PERFORMED BY MERIDIAN SURVEYING, LLC ON JULY 15, 2021.
  - WETLAND DELINEATION CONDUCTED BY EVERGREEN CONSULTANTS, LLC ON JULY 14, 2021
  - PROPOSED OFFICE, STORAGE AND 4 BAY GARAGE LAYOUT AUTOCAD FILE "21-076 A-CHAPPA CONSTRUCTION (HARTER'S TRUCK REPAIR GARAGE) - FLOOR PLAN - 1 - FIRST FLOOR - PHASE 3" PROVIDED BY CHAPPA CONSTRUCTION ON NOVEMBER 19, 2021.
  - GROUNDWATER CONTAMINATION LIMITS, SOIL CONTAMINATION LIMITS, EXCAVATION EXTENTS, AND SOIL SAMPLE LOCATIONS FROM FIGURE B.2.b AND FIGURE B.3.b DATED JANUARY 30, 2017 BY ENDEAVOR ENVIRONMENTAL SERVICES, INC.
  - SELECT SIDEWALL SOIL SAMPLES SHOWN REPRESENTING THE REMAINING IN-PLACE SOIL CONTAMINATION. REFER TO SITE CLOSURE DOCUMENTS FOR ADDITIONAL SAMPLE LOCATIONS.
  - SUB-SLAB VAPOR SAMPLES COLLECTED BY SCS ENGINEERS ON 3/15/2022.



Attachment A  
Sub-Slab Vapor Laboratory Report

March 25, 2022

Rob Langdon  
SCS Engineers  
2830 Dairy Dr.  
Madison, WI 53718

RE: Project: 25221142.00 Harter's  
Pace Project No.: 10600785

Dear Rob Langdon:

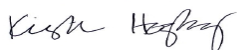
Enclosed are the analytical results for sample(s) received by the laboratory on March 16, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kirsten Hogberg  
kirsten.hogberg@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 25221142.00 Harter's

Pace Project No.: 10600785

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### **Pace Analytical Services, LLC - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 25221142.00 Harter's

Pace Project No.: 10600785

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Lab ID	Sample ID	Matrix	Date Collected	Date Received
10600785001	SS-1	Air	03/15/22 12:12	03/16/22 09:51
10600785002	SS-2	Air	03/15/22 12:35	03/16/22 09:51

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### SAMPLE ANALYTE COUNT

Project: 25221142.00 Harter's

Pace Project No.: 10600785

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10600785001	SS-1	TO-15	AFV	12	PASI-M
10600785002	SS-2	TO-15	AFV	12	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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## SUMMARY OF DETECTION

Project: 25221142.00 Harter's

Pace Project No.: 10600785

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>10600785001</b>	<b>SS-1</b>					
TO-15	Benzene	3.1	ug/m3	0.56	03/24/22 15:43	
TO-15	Toluene	7.9	ug/m3	1.3	03/24/22 15:43	
TO-15	Ethylbenzene	2.5	ug/m3	1.5	03/24/22 15:43	
TO-15	m&p-Xylene	7.0	ug/m3	3.0	03/24/22 15:43	
TO-15	o-Xylene	2.7	ug/m3	1.5	03/24/22 15:43	
TO-15	1,3,5-Trimethylbenzene	1.5J	ug/m3	1.7	03/24/22 15:43	
TO-15	1,2,4-Trimethylbenzene	3.6	ug/m3	1.7	03/24/22 15:43	
TO-15	n-Propylbenzene	1.5J	ug/m3	4.3	03/24/22 15:43	
TO-15	1,2,3-Trimethylbenzene	1.4J	ug/m3	1.7	03/24/22 15:43	
<b>10600785002</b>	<b>SS-2</b>					
TO-15	Benzene	4.5	ug/m3	0.58	03/24/22 16:41	
TO-15	Toluene	11.9	ug/m3	1.4	03/24/22 16:41	
TO-15	Ethylbenzene	3.3	ug/m3	1.6	03/24/22 16:41	
TO-15	m&p-Xylene	8.5	ug/m3	3.2	03/24/22 16:41	
TO-15	o-Xylene	4.6	ug/m3	1.6	03/24/22 16:41	
TO-15	1,3,5-Trimethylbenzene	1.6J	ug/m3	1.8	03/24/22 16:41	
TO-15	1,2,4-Trimethylbenzene	3.5	ug/m3	1.8	03/24/22 16:41	
TO-15	Naphthalene	5.0	ug/m3	4.8	03/24/22 16:41	
TO-15	n-Propylbenzene	1.6J	ug/m3	4.5	03/24/22 16:41	
TO-15	1,2,3-Trimethylbenzene	1.4J	ug/m3	1.8	03/24/22 16:41	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 25221142.00 Harter's

Pace Project No.: 10600785

**Sample: SS-1**      **Lab ID: 10600785001**      Collected: 03/15/22 12:12      Received: 03/16/22 09:51      Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
Pace Analytical Services - Minneapolis									
1,2-Dichloroethane	<0.33	ug/m3	1.4	0.33	1.71		03/24/22 15:43	107-06-2	
Benzene	3.1	ug/m3	0.56	0.19	1.71		03/24/22 15:43	71-43-2	
Toluene	7.9	ug/m3	1.3	0.42	1.71		03/24/22 15:43	108-88-3	
Ethylbenzene	2.5	ug/m3	1.5	0.53	1.71		03/24/22 15:43	100-41-4	
m&p-Xylene	7.0	ug/m3	3.0	1.1	1.71		03/24/22 15:43	179601-23-1	
o-Xylene	2.7	ug/m3	1.5	0.46	1.71		03/24/22 15:43	95-47-6	
1,3,5-Trimethylbenzene	1.5J	ug/m3	1.7	0.50	1.71		03/24/22 15:43	108-67-8	
1,2,4-Trimethylbenzene	3.6	ug/m3	1.7	0.61	1.71		03/24/22 15:43	95-63-6	
Methyl-tert-butyl ether	<0.22	ug/m3	6.3	0.22	1.71		03/24/22 15:43	1634-04-4	
Naphthalene	<3.7	ug/m3	4.5	3.7	1.71		03/24/22 15:43	91-20-3	
n-Propylbenzene	1.5J	ug/m3	4.3	0.62	1.71		03/24/22 15:43	103-65-1	
1,2,3-Trimethylbenzene	1.4J	ug/m3	1.7	0.50	1.71		03/24/22 15:43	526-73-8	

**Sample: SS-2**      **Lab ID: 10600785002**      Collected: 03/15/22 12:35      Received: 03/16/22 09:51      Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
Pace Analytical Services - Minneapolis									
1,2-Dichloroethane	<0.35	ug/m3	1.5	0.35	1.79		03/24/22 16:41	107-06-2	
Benzene	4.5	ug/m3	0.58	0.20	1.79		03/24/22 16:41	71-43-2	
Toluene	11.9	ug/m3	1.4	0.44	1.79		03/24/22 16:41	108-88-3	
Ethylbenzene	3.3	ug/m3	1.6	0.55	1.79		03/24/22 16:41	100-41-4	
m&p-Xylene	8.5	ug/m3	3.2	1.1	1.79		03/24/22 16:41	179601-23-1	
o-Xylene	4.6	ug/m3	1.6	0.49	1.79		03/24/22 16:41	95-47-6	
1,3,5-Trimethylbenzene	1.6J	ug/m3	1.8	0.52	1.79		03/24/22 16:41	108-67-8	
1,2,4-Trimethylbenzene	3.5	ug/m3	1.8	0.63	1.79		03/24/22 16:41	95-63-6	
Methyl-tert-butyl ether	<0.23	ug/m3	6.6	0.23	1.79		03/24/22 16:41	1634-04-4	
Naphthalene	5.0	ug/m3	4.8	3.9	1.79		03/24/22 16:41	91-20-3	
n-Propylbenzene	1.6J	ug/m3	4.5	0.65	1.79		03/24/22 16:41	103-65-1	
1,2,3-Trimethylbenzene	1.4J	ug/m3	1.8	0.52	1.79		03/24/22 16:41	526-73-8	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 25221142.00 Harter's

Pace Project No.: 10600785

QC Batch: 805473	Analysis Method: TO-15
QC Batch Method: TO-15	Analysis Description: TO15 MSV AIR Low Level
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10600785001, 10600785002

METHOD BLANK: 4275548 Matrix: Air

Associated Lab Samples: 10600785001, 10600785002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,3-Trimethylbenzene	ug/m3	<0.29	1.0	03/24/22 09:46	
1,2,4-Trimethylbenzene	ug/m3	<0.35	1.0	03/24/22 09:46	
1,2-Dichloroethane	ug/m3	<0.19	0.82	03/24/22 09:46	
1,3,5-Trimethylbenzene	ug/m3	<0.29	1.0	03/24/22 09:46	
Benzene	ug/m3	<0.11	0.32	03/24/22 09:46	
Ethylbenzene	ug/m3	<0.31	0.88	03/24/22 09:46	
m&p-Xylene	ug/m3	<0.64	1.8	03/24/22 09:46	
Methyl-tert-butyl ether	ug/m3	<0.13	3.7	03/24/22 09:46	
n-Propylbenzene	ug/m3	<0.36	2.5	03/24/22 09:46	
Naphthalene	ug/m3	<2.2	2.7	03/24/22 09:46	
o-Xylene	ug/m3	<0.27	0.88	03/24/22 09:46	
Toluene	ug/m3	<0.24	0.77	03/24/22 09:46	

LABORATORY CONTROL SAMPLE: 4275549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trimethylbenzene	ug/m3	54.2	54.8	101	70-140	
1,2,4-Trimethylbenzene	ug/m3	54	53.9	100	70-137	
1,2-Dichloroethane	ug/m3	44.4	49.0	110	70-134	
1,3,5-Trimethylbenzene	ug/m3	53.7	53.9	100	70-131	
Benzene	ug/m3	34.8	37.3	107	70-130	
Ethylbenzene	ug/m3	47.8	54.6	114	70-133	
m&p-Xylene	ug/m3	95.4	96.6	101	70-134	
Methyl-tert-butyl ether	ug/m3	39.6	43.5	110	70-131	
n-Propylbenzene	ug/m3	54	51.8	96	70-143	
Naphthalene	ug/m3	65.2	64.9	99	70-130	
o-Xylene	ug/m3	47.6	47.9	101	70-134	
Toluene	ug/m3	41.6	41.2	99	70-136	

SAMPLE DUPLICATE: 4276606

Parameter	Units	10600785001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,3-Trimethylbenzene	ug/m3	1.4J	1.4J			25
1,2,4-Trimethylbenzene	ug/m3	3.6	3.4	6		25
1,2-Dichloroethane	ug/m3	<0.33	<0.33			25
1,3,5-Trimethylbenzene	ug/m3	1.5J	1.6J			25
Benzene	ug/m3	3.1	3.0	3		25

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 25221142.00 Harter's

Pace Project No.: 10600785

SAMPLE DUPLICATE: 4276606

Parameter	Units	10600785001 Result	Dup Result	RPD	Max RPD	Qualifiers
Ethylbenzene	ug/m3	2.5	2.4	1	25	
m&p-Xylene	ug/m3	7.0	6.8	3	25	
Methyl-tert-butyl ether	ug/m3	<0.22	<0.22		25	
n-Propylbenzene	ug/m3	1.5J	1.5J		25	
Naphthalene	ug/m3	<3.7	<3.7		25	
o-Xylene	ug/m3	2.7	2.7	2	25	
Toluene	ug/m3	7.9	7.3	7	25	

SAMPLE DUPLICATE: 4276607

Parameter	Units	10600785002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,3-Trimethylbenzene	ug/m3	1.4J	1.5J		25	
1,2,4-Trimethylbenzene	ug/m3	3.5	3.5	0	25	
1,2-Dichloroethane	ug/m3	<0.35	<0.35		25	
1,3,5-Trimethylbenzene	ug/m3	1.6J	1.5J		25	
Benzene	ug/m3	4.5	4.5	1	25	
Ethylbenzene	ug/m3	3.3	3.4	3	25	
m&p-Xylene	ug/m3	8.5	9.2	8	25	
Methyl-tert-butyl ether	ug/m3	<0.23	<0.23		25	
n-Propylbenzene	ug/m3	1.6J	1.6J		25	
Naphthalene	ug/m3	5.0	5.1	1	25	
o-Xylene	ug/m3	4.6	4.7	2	25	
Toluene	ug/m3	11.9	11.4	4	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 25221142.00 Harter's

Pace Project No.: 10600785

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 25221142.00 Harter's

Pace Project No.: 10600785

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<b>Lab ID</b>	<b>Sample ID</b>	<b>QC Batch Method</b>	<b>QC Batch</b>	<b>Analytical Method</b>	<b>Analytical Batch</b>
10600785001	SS-1	TO-15	805473		
10600785002	SS-2	TO-15	805473		

### REPORT OF LABORATORY ANALYSIS

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# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

52381

Page: 1 of 1

<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:	<b>Program</b>
Company: <u>SES Engineers</u>	Report To: <u>Robert Langdon</u>	Attention: <u>Same</u>	<input type="checkbox"/> UST <input type="checkbox"/> Superfund <input type="checkbox"/> Emissions <input type="checkbox"/> Clean Air Act <input checked="" type="checkbox"/> Voluntary Clean Up <input type="checkbox"/> Dry Clean <input type="checkbox"/> RCRA <input type="checkbox"/> Other
Address: <u>2839 Dairy Dr Madison WI 53708</u>	Copy To: _____	Company Name: <u>SES Engineers</u>	
Email To: <u>rlangdon@sesengineers.com</u>	Purchase Order No.: _____	Address: <u>Same</u>	Location of Sampling by State: <u>WI</u>
Phone: <u>608-212-3985</u> Fax: _____	Project Name: <u>Harter's</u>	Pace Quote Reference: _____	Reporting Units ug/m <sup>3</sup> _____ mg/m <sup>3</sup> _____ PPBV <input checked="" type="checkbox"/> PPMV _____ Other _____
Requested Due Date/TAT: _____	Project Number: <u>6 25221142.00</u>	Pace Project Manager/Sales Rep. _____	Report Level II. ___ III. ___ IV. ___ Other _____
		Pace Profile #: <u>37630</u>	

ITEM #	'Section D Required Client Information <b>AIR SAMPLE ID</b> Sample IDs MUST BE UNIQUE	Valid Media Codes MEDIA CODE Tedlar Bag TB 1 Liter Summa Can 1LC 6 Liter Summa Can 6LC Low Volume Puff LVP High Volume Puff HVP Other PM10	MEDIA CODE	PID Reading (Client only)	COLLECTED				Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10 3C - Fixed Gas (%) TO-3 BTEX TO-3M (Methane) TO-14 TO-15 Full List VOCs TO-15 Short List BTEX TO-15 Short List Chlorinated TO-15 Short List (Other)	Pace Lab ID
					COMPOSITE START		COMPOSITE - END/GRAB							
					DATE	TIME	DATE	TIME						
1	SS-1		600	0	3/15/22	1427	3/15/22	1212	30	8	0668	1902	X	001
2	SS-2		600	0	3/15/22	1459	3/15/22	1235	28	9	1495	0925	X	002
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

WO#: 10600785



Comments: Analyze for =  
procs + naphthalene,  
1,2,3 trimethylbenzene,  
n-propylbenzene, 1,2 dichloroethane

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
<u>Robert Langdon / SES</u>	<u>3/15/22</u>	<u>1700</u>	<u>Matt [Signature] / Pace</u>	<u>3/16/22</u>	<u>9:51</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAMPLER NAME AND SIGNATURE  
 PRINT Name of SAMPLER: \_\_\_\_\_  
 SIGNATURE BY SAMPLER: [Signature] DATE Signed (MM/DD/YYYY): 3/15/22

Temp in °C  
 Received on Ice: \_\_\_\_\_  
 Custody Sealed Cooler: \_\_\_\_\_  
 Samples Intact: \_\_\_\_\_

ORIGINAL







Pace Analytical Services, LLC  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

**ANALYTICAL RESULTS**

Client: SCS Engineers  
 Phone: 843.746.8525  
 Lab Sample No: 10600785001  
 Client Sample ID: SS-1

Lab Project Number: 10600785  
 Project Name: 25221142.00 Harter's  
 Date Collected: 03/15/22 12:12  
 Date Received: 03/16/22 9:51

ProjSampleNum: 10600785001  
 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
1,2,3-Trimethylbenzene	0.28J	ppbv	0.34	1.71	03/24/22 15:43 AFV	526-73-8	
1,2,4-Trimethylbenzene	0.72	ppbv	0.34	1.71	03/24/22 15:43 AFV	95-63-6	
1,2-Dichloroethane	<0.08	ppbv	0.34	1.71	03/24/22 15:43 AFV	107-06-2	
1,3,5-Trimethylbenzene	0.3J	ppbv	0.34	1.71	03/24/22 15:43 AFV	108-67-8	
Benzene	0.95	ppbv	0.17	1.71	03/24/22 15:43 AFV	71-43-2	
Ethylbenzene	0.57	ppbv	0.34	1.71	03/24/22 15:43 AFV	100-41-4	
m&p-Xylene	1.6	ppbv	0.68	1.71	03/24/22 15:43 AFV	179601-23-1	
Methyl-tert-butyl ether	<0.06	ppbv	1.7	1.71	03/24/22 15:43 AFV	1634-04-4	
Naphthalene	<0.69	ppbv	0.84	1.71	03/24/22 15:43 AFV	91-20-3	
n-Propylbenzene	0.3J	ppbv	0.86	1.71	03/24/22 15:43 AFV	103-65-1	
o-Xylene	0.61	ppbv	0.34	1.71	03/24/22 15:43 AFV	95-47-6	
Toluene	2.1	ppbv	0.34	1.71	03/24/22 15:43 AFV	108-88-3	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

**SUPPLEMENTAL REPORT**  
 Units Conversion Request



Pace Analytical Services, LLC  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

**ANALYTICAL RESULTS**

Client: SCS Engineers  
 Phone: 843.746.8525  
 Lab Sample No: 10600785002  
 Client Sample ID: SS-2

Lab Project Number: 10600785  
 Project Name: 25221142.00 Harter's  
 Date Collected: 03/15/22 12:35  
 Date Received: 03/16/22 9:51

ProjSampleNum: 10600785002  
 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
1,2,3-Trimethylbenzene	0.28J	ppbv	0.36	1.79	03/24/22 16:41	AFV 526-73-8	
1,2,4-Trimethylbenzene	0.7	ppbv	0.36	1.79	03/24/22 16:41	AFV 95-63-6	
1,2-Dichloroethane	<0.085	ppbv	0.36	1.79	03/24/22 16:41	AFV 107-06-2	
1,3,5-Trimethylbenzene	0.32J	ppbv	0.36	1.79	03/24/22 16:41	AFV 108-67-8	
Benzene	1.4	ppbv	0.18	1.79	03/24/22 16:41	AFV 71-43-2	
Ethylbenzene	0.75	ppbv	0.36	1.79	03/24/22 16:41	AFV 100-41-4	
m&p-Xylene	1.9	ppbv	0.72	1.79	03/24/22 16:41	AFV 179601-23-1	
Methyl-tert-butyl ether	<0.063	ppbv	1.8	1.79	03/24/22 16:41	AFV 1634-04-4	
Naphthalene	0.94	ppbv	0.9	1.79	03/24/22 16:41	AFV 91-20-3	
n-Propylbenzene	0.32J	ppbv	0.9	1.79	03/24/22 16:41	AFV 103-65-1	
o-Xylene	1	ppbv	0.36	1.79	03/24/22 16:41	AFV 95-47-6	
Toluene	3.1	ppbv	0.37	1.79	03/24/22 16:41	AFV 108-88-3	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

**SUPPLEMENTAL REPORT**  
 Units Conversion Request



Pace Analytical Services, LLC  
1700 Elm Street, Suite 200  
Minneapolis, MN 55414  
Phone: 612.607.1700  
Fax: 612.607.6444

## ANALYTICAL RESULTS

Client: SCS Engineers  
Phone: 843.746.8525

Lab Project Number: 10600785  
Project Name: 25221142.00 Harter's

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## PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT  
Units Conversion Request

Date: 3/25/2022

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