

September 27, 2019

Mr. Josh Ivey Milwaukee Holdings, LLC. P.O. Box 8460 Des Moines, Iowa 50301

Subject: Underground Storage Tank (UST) and Petroleum

Impacted Soil Removal and Closure Assessment Report

Former Comedy Club Cafe

615 E. Brady Street

Milwaukee, Wisconsin 53202

UEC Project No. 18009

Dear Mr. Ivey:

United Engineering Consultants, Inc. (United) has prepared this report which documents the removal of two (2) USTs and the associated piping, the removal of petroleum affected soil and the results of a subsequent closure assessment performed at the above referenced property. If you have any questions, or wish to discuss any part of this report, please contact us at (262) 785-1447.

Respectfully submitted, United Engineering Consultants, Inc.

Nick Anderson Nicholas J. Anderson, E.I.T.

Staff Engineer

Timothy J. Anderson, P.E.

Timothy J. anderson

Principal

# UNDERGROUND STORAGE TANK (UST) AND PETROLEUM IMPACTED SOIL REMOVAL AND CLOSURE ASSESSMENT REPORT

## **PERFORMED AT:**

FORMER COMEDY CLUB CAFE 615 E. BRADY STREET MILWAUKEE, WISCONSIN 53202

PREPARED FOR:

MR. JOSH IVEY
MILWAUKEE HOLDINGS LLC
P.O. BOX 8460
DES MOINES, IOWA 50301

**SEPTEMBER 27, 2019** 

PREPARED BY:

UNITED ENGINEERING CONSULTANTS, INC. 16237 W. RYERSON ROAD NEW BERLIN, WISCONSIN 53151

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## 1.0 INTRODUCTION

This report documents the Underground Storage Tank (UST), associated piping and petroleum impacted soil removal activities and the results of a closure assessment performed at 615 E. Brady Street in Milwaukee, Wisconsin. The UST removals and tank system assessment was performed by United at the request of Mr. Josh Ivey, a Principal of Milwaukee Holdings LLC.

## 2.0 PROJECT INFORMATION

Site Contact: Mr. Josh Ivey

Milwaukee Holdings LLC

P.O. Box 8460

Des Moines, Iowa 50301

(319) 530-0289

Site Assessor: Mr. Nicholas J. Anderson

United Engineering Consultants, Inc.

16237 W. Ryerson Road New Berlin, Wisconsin 53151

(262) 785-1447

Site Location: Former Comedy Club Cafe

615 E. Brady Street

Milwaukee, Wisconsin 53202

NW 1/4 of SW 1/4 of Section 21, T7N, R22E Milwaukee County (See Figure 1 - Site Location

Map)

Type of Facility: Commercial property

Tanks Removed: One (1), one thousand (1,000) gallon and one (1),

four thousand (4,000) gallon single walled UST and associated piping containing waste oil and gasoline, respectively (See Appendix – Wisconsin Department of Agriculture, Trade and Consumer Protection – Bureau of Weights and Measures – Storage Tank Regulation Form TR-

WM-137 March 5 and 7, 2019)

**UNITED ENGINEERING CONSULTANTS, INC.** 615 E. Brady Street – UST System Closure Assessment September 27, 2019
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## 3.0 FACILITY DESCRIPTION

The subject property is 0.20 acres in size and is located at 615 E. Brady Street in Milwaukee, Wisconsin. The parcel is currently occupied by a duplex approximately eleven hundred seventy four (1,174) square feet in plan dimension. At the time of the UST removal, the foundation for a former three thousand five hundred seventy nine (3,579) square foot commercial structure was located immediately east-northeast of the duplex. The surface of the interior of the former commercial building was covered with concrete debris, gravel and limestone. The remainder of the surface of the subject property was covered with concrete and asphaltic concrete.

A combined sanitary and storm sewer lateral entered the northwest corner of the former commercial structure and enters the western elevation of the existing commercial building. The combined sewer lateral is connected to a main in the N. Jackson Street right-of-way. Underground natural gas and potable water service entered the former commercial structure along its western elevation. However, these laterals have been abandoned during recent site development activities. An abandoned brick catch basin was formerly located at the southwest corner of the subject property immediately adjacent to the N. Jackson Street right-of-way. The remains of the catch basin were also removed during recent site development activities.

Underground natural gas and potable water service entered the duplex at its southwest corner and along its western elevation, respectively, from laterals connected to mains in the N. Jackson Street right-of-way. The potable water line remains while the natural gas lateral was removed. An underground natural gas and potable water lateral currently extends from the mains in the N. Jackson Street right-of-way in a common trench to the northern elevation of the duplex to service the commercial building. Electric and telecommunication service for the duplex and the proposed commercial building extends to the structures from adjacent utility poles.

During site development activities, a one thousand (1,000) gallon capacity UST was discovered approximately five (5) feet north and eight (8) feet east of the northeast corner of the duplex. The tank contained approximately five hundred (500) gallons of waste oil/sludge. A second UST, four thousand (4,000) gallons in capacity was discovered approximately thirty nine (39) feet north of the northeast corner of the duplex. The tank contained water and pea gravel and was assumed to formerly contain gasoline (See Figure 2 – Site Plan Map).

According to the State of Wisconsin Department of Agriculture and Consumer Trade Protection (DATCP) storage tank database, there were no USTs registered at the subject property.

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## 4.0 TANK REMOVAL ACTIVITIES

The Wisconsin Department of Safety and Professional Services (WDSPS) Local Program Operator (LPO) for the City of Milwaukee, Mr. Chris Buzell of the City of Milwaukee Department of Neighborhood Services was notified by telephone on March 2, 2018 of an emergency removal request of the two (2) USTs and any associated piping. Mr. Buzell scheduled an inspection for March 5, 2018.

The removal operations were performed on March 5 and 7, 2018 by Jeff Seeger of K&S Contractors, Inc. (K&S) under the supervision of United personnel. The overburden soils consisting of brown clayey silt with varying amounts of sand and gravel were removed to expose the top of each UST. Once the top of the tanks was exposed, openings were cut into each UST. Approximately three thousand three hundred (3300) gallons of water was initially removed from the four thousand (4000) gallon tank early in the morning of March 5, 2018 by Future Industrial Services, Inc. (Future).

The exposed pea gravel in the four thousand (4000) gallon UST and about five hundred (500) gallons of waste oil/sludge in the one thousand (1000) gallon tank were subsequently evacuated from the four thousand (4000) and one thousand (1000) gallon USTs, respectively, by Future mid-morning on March 5, 2018. Future listed the combined quantity as one thousand nine hundred fifty (1950) gallons of waste on the Advanced Disposal Special Waste Manifest Disposal Ticket. An additional two thousand (2000) gallons of water was removed from the four thousand (4000) gallon tank late in the morning of March 5, 2018. Future returned on March 7, 2018 to evacuate approximately one thousand (1000) gallons of water from the four thousand (4000) gallon UST and the immediately adjacent excavation limits.

The water was transported by Future to Elite Environmental in West Allis, Wisconsin and the pea gravel and waste oil/sludge were transported to Advanced Disposal's Emerald Park Landfill (See Appendix – Non-Hazardous Waste Manifests – 0023088, 0023080 and 0023169 and Advanced Disposal Special Waste Manifest Disposal Ticket).

The atmosphere of each UST was monitored with a Combustible Gas Indicator (CGI) for the presence of flammable or combustible vapor levels prior to removal. The CGI was calibrated prior to its use and the atmosphere was monitored at the bottom, middle, and upper portion of the tanks. Readings below ten (10) percent of the Lower Explosive Limit (LEL) were measured at the previously mentioned locations in the USTs.

On March 5, 2018 and March 7, 2018 respectively, the former one thousand (1,000) gallon waste oil UST and former four thousand (4,000) gallon gasoline UST were removed and blocked to prevent movement. The USTs were labeled with two (2) inch letters indicating the date removed, their capacity and former usage, a vapor free state as well as "not for reuse" prior to removal from the site for proper disposal (See Appendix-Wisconsin DATCP - Bureau of Weights and Measures, Permits and Licensing – Form TR-WM-140 Part A – March 5 and 7, 2018).

## UNITED ENGINEERING CONSULTANTS, INC.

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The resulting excavation for the former one thousand (1,000) gallon waste oil UST measured approximately nine (9) feet in length by seven (7) feet in width by about seven (7) feet in depth. The tank was sixty four (64) inches in diameter and six (6) feet in length. The UST was constructed of bare steel with several holes and areas of corrosion observed. The soil encountered at the bottom of this excavation was fill consisting of grayish brown sand and gravel. Visible soil staining and petroleum odor were observed in the excavation limits.

The resulting excavation for the former four thousand (4,000) gallon UST measured approximately thirty (30) feet in length, ten (10) feet in width and nine (9) feet in depth. The tank was sixty four (64) inches in diameter and twenty four (24) feet in length. The UST was constructed of bare steel with several holes and areas of corrosion observed. The soil encountered at the bottom of this excavation was fill consisting of grayish brown sand and gravel. Visible soil staining and petroleum odor were observed in the excavation limits.

## 5.0 PETROLEUM AFFECTED SOIL REMOVAL

On March 5 and 7, 2018, approximately forty (40) tons of waste oil and gasoline impacted soil were excavated and stockpiled on site by K&S. The affected soil was placed on and covered with 4-mil plastic. Petroleum impacted soil was excavated to approximately eleven (11) feet beneath the existing ground surface (bgs) in the area of the former four thousand (4,000) gallon tank. The native soils at this depth consist of very dense brown clayey silt to silty clay with varying amounts of sand and gravel. Petroleum affected soil was excavated to about nine (9) feet bgs in the area of the former one thousand (1,000) gallon tank. A concrete slab was encountered at this depth. The petroleum affected soil located in the sidewalls was removed laterally based on visual and olfactory observations (See Figure 3 – Excavation Limits and Closure Assessment Sample Location Map). The excavated petroleum impacted soil consisted of grayish brown sand and gravel. Groundwater was not encountered during the soil removal activities.

At the request of Waste Management, a composite soil sample was collected from the stockpile and analyzed for the presence of Lead, Volatile Organic Compounds (VOC), Semi-Volatile Organic Compounds (SVOC) utilizing the Toxicity Characteristic Leaching Procedure (TCLP). The TCLP analytical results indicate the presence of Tetrachloroethene at an estimated concentration of 0.00675 mg/L. No other compounds were present at or above their respective detection limits.

The waste oil and petroleum affected soil was subsequently approved for direct landfill disposal at Metro RDF Management Facility in Franklin, Wisconsin under existing profile, V128792WI, which was previously issued for the chlorinated solvent impacted soil at the property. The petroleum impacted soil was transported by K&S on March 22 and 23, 2018.

## 6.0 SITE ASSESSMENT/CLOSURE SAMPLING ACTIVITIES

Subsequent to the removal of the four thousand (4,000) gallon UST and the petroleum impacted soil, samples were collected from the native soil beneath the former ends and approximate center of the tank. The soil samples were collected at an approximate depth of twelve (12) feet bgs in the native brown silty clay with trace sand and gravel (See Figure 3 – Excavation Limits and Closure Assessment Sample Location Map). After collection of the samples, the excavation was backfilled with overburden soils and lean concrete due to the presence of the former UST beneath the proposed building foundation. Soil samples were not collected beneath the one thousand (1,000) gallon tank due to the presence of a concrete slab.

The samples were subjected to analysis for the presence of Petroleum Volatile Organic Compounds (PVOC) and Naphthalene by methods GRO95 and PUBL-SW-140. The samples were handled in a manner which minimized volatilization and approximately thirteen (13) grams of soil was added to clean glass containers. The PVOC and Naphthalene samples were subsequently preserved with a premeasured vial of laboratory grade methanol supplied by the testing laboratory. The containers were placed in a cooler on ice, and transported to Environmental Monitoring and Technologies EMT Inc. (WDNR #999888890) in Morton Grove, Illinois. The samples were accompanied by a completed Chain-of-Custody form.

The results of the laboratory analysis indicated the presence of Naphthalene at the sampled locations at concentrations ranging from 0.116 mg/kg to 0.165 mg/kg. These concentrations are below the Groundwater Pathway and Non-Industrial Direct Contact Residual Contaminant Levels (RCLs) of 0.6582 mg/kg and 5.52 mg/kg, respectively. No additional compounds were identified at concentrations at or above their respective detection limits (See Table – Soil Analytical Results – PVOC & Naphthalene and the Appendix- Wisconsin DATCP - Bureau of Weights and Measures, Permits and Licensing – Form TR-WM-140 Part B – March 5 and 7, 2018 and Soil Analytical Results and Chain-of-Custody Form – March 7, 2018).

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical results, PVOCs are not present in the native soil at an approximate depth of twelve (12) feet bgs at concentrations at or above their respective detection limits beneath the former four thousand (4000) gallon gasoline UST subsequent to the removal of approximately two (2) feet of petroleum affected soil. Naphthalene concentrations ranging from 0.116 mg/kg to 0.165 mg/kg are documented at the sampled locations beneath the former tank. However, these concentrations do not exceed any of the established RCLs for Naphthalene. Therefore, further soil removal beneath the gasoline UST was not warranted.

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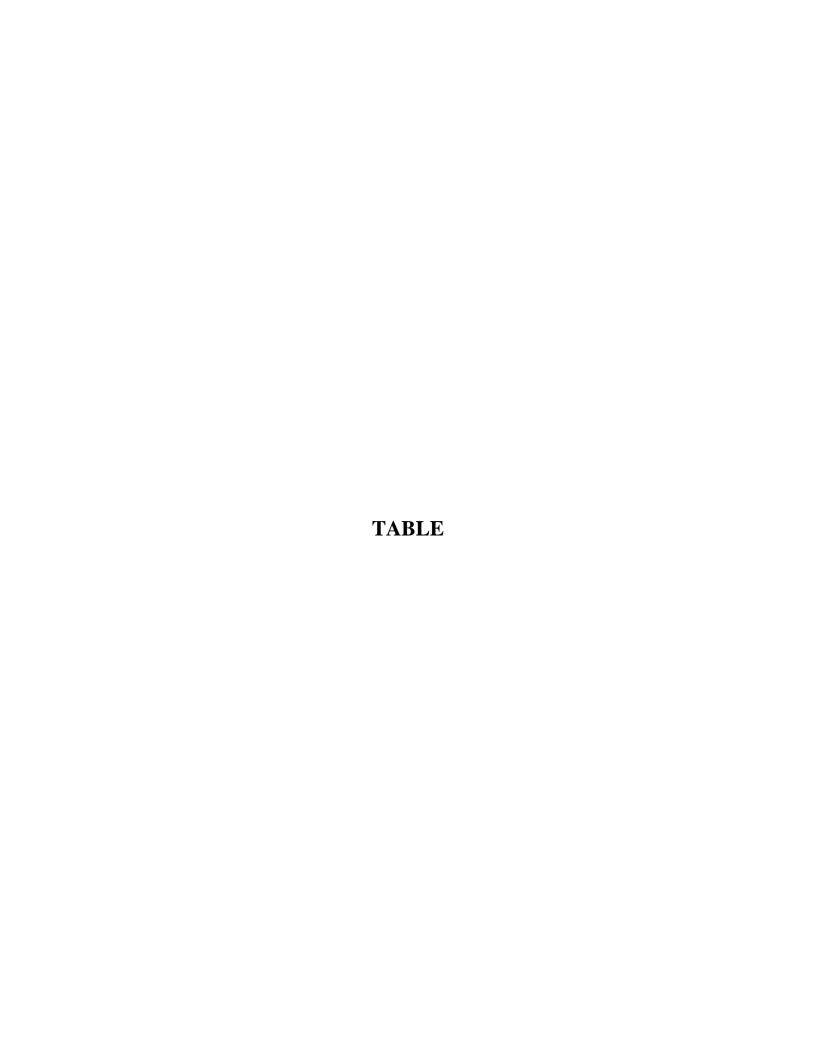
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Petroleum impacted soil was also removed beneath the former one thousand (1000) gallon waste oil UST for an approximate depth of two (2) feet. The excavation was terminated due to the presence of a concrete slab approximately two (2) feet below the bottom of the former UST. It is anticipated the concrete slab significantly impeded downward migration of petroleum contamination below approximately nine (9) feet bgs.

The WDNR was notified of the waste oil and gasoline release to the soil by United on June 19, 2018. The WDNR opened Leaking Underground Storage Tank (LUST) case #03-41-581665 on June 25, 2018. It is recommended that a Case Closure request for the LUST case be prepared and submitted to the WDNR incorporating the site investigation analytical results from the open Environmental Repair (ERP) case #02-41-553001 at the subject property. Benzene, Ethylbenzene, Toluene and total Xylenes (BTEX) have been documented in the soil in the immediate area of the former gasoline UST during the ERP investigation. The pathway to LUST case closure will most likely include placement of the subject property on the Wisconsin Remediation and Redevelopment Database for residual BTEX soil contamination.

## 8.0 GENERAL COMMENTS

The UST and Petroleum Impacted Soil Removal and Closure Assessment Report has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, opinions and recommendations contained herein have been promulgated in accordance with generally accepted practice. No other representations, expressed or implied, and no warranty or guarantee is included in this report.



# Table Soil Analytical Results - PVOC & Naphthalene

## Former Comedy Club Cafe 615 E. Brady Street

## Milwaukee, Wisconsin 53202

Sample Date		03/07/2018		RCL						
Sample Identification	PE-W	PE-C	PE-E	GWP	NIDC	IDC				
Sample Depth	12'	12'	12'	GWP	NIDC	IDC				
Petroleum Volatile Organic Compounds (PVOC) and Naphthalene (Method: GRO95/PUBL-SW-140)										
Benzene	<0.0386	<0.0386	<0.0386	0.0051	1.6	7.07				
Ethylbenzene	<0.0252	<0.0252	<0.0252	1.57	8.02	35.4				
Methyl tert-butyl ether	<0.0663	<0.0663	< 0.0663	0.027	63.8	282				
Naphthalene	0.134	0.116	0.165	0.6582	5.52	24.1				
Toluene	<0.0463	<0.0463	<0.0463	1.1072	818	818				
1,2,4 -Trimethylbenzene	<0.0426/	<0.0426/	<0.0426/	1.3787	219	219				
1,3,5 -Trimethylbenzene	<0.0250	<0.0250	<0.0250	1.3707	182	182				
m&p-Xylene	<0.0250	<0.0250	<0.0250	-	388	388				
o-Xylene	<0.0317	<0.0317	<0.0317	-	434	434				
Xylenes, Total	<0.0536	<0.0536	<0.0536	3.96	260	260				

Notes: All samples collected from the unsaturated zone

All results expressed as mg/kg unless otherwise noted

RCL Residual Contaminant Level (December 2018 RCL Spreadsheet Update)

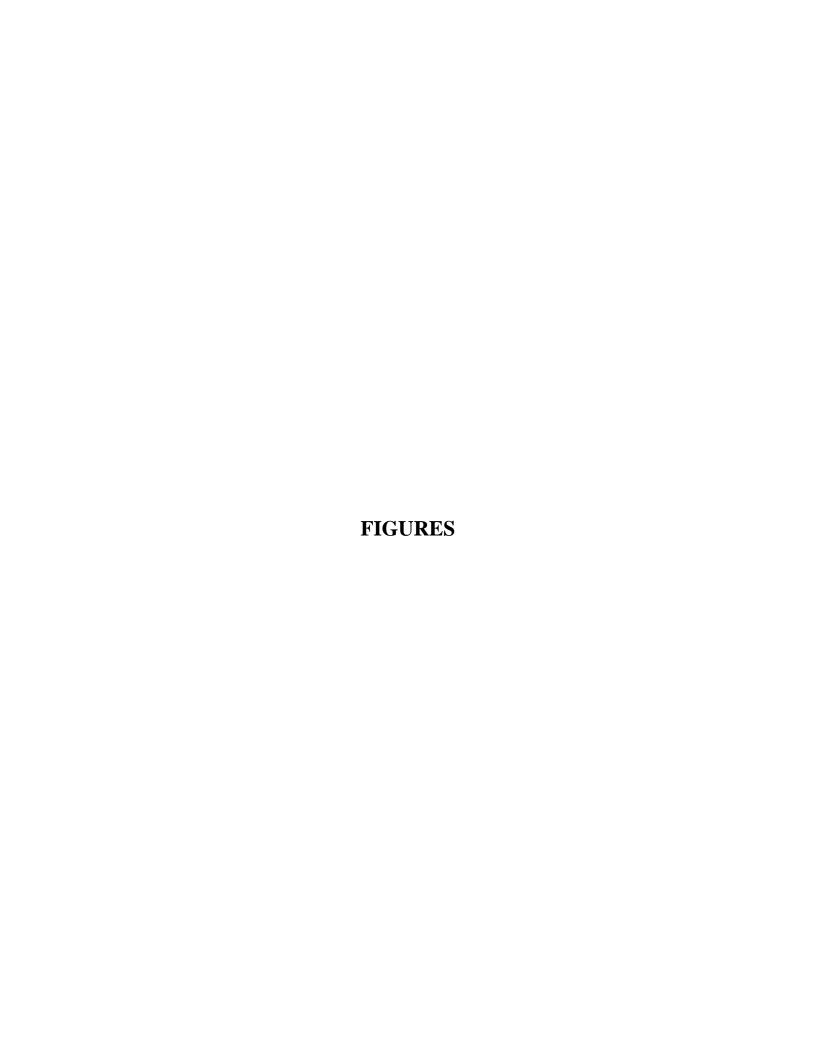
GWP Groundwater Pathway RCL (Exceedances are <u>underlined</u>)

NIDC Non-Industrial Direct Contact RCL (Exceedances in **bold**)

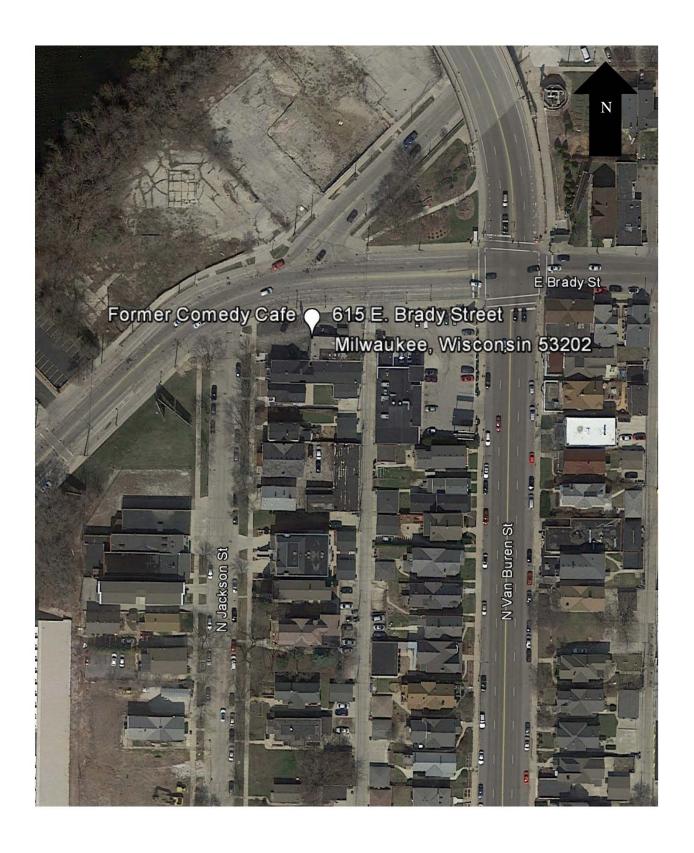
IDC Industrial Direct Contact RCL (Exceedances in **bold** and shaded)

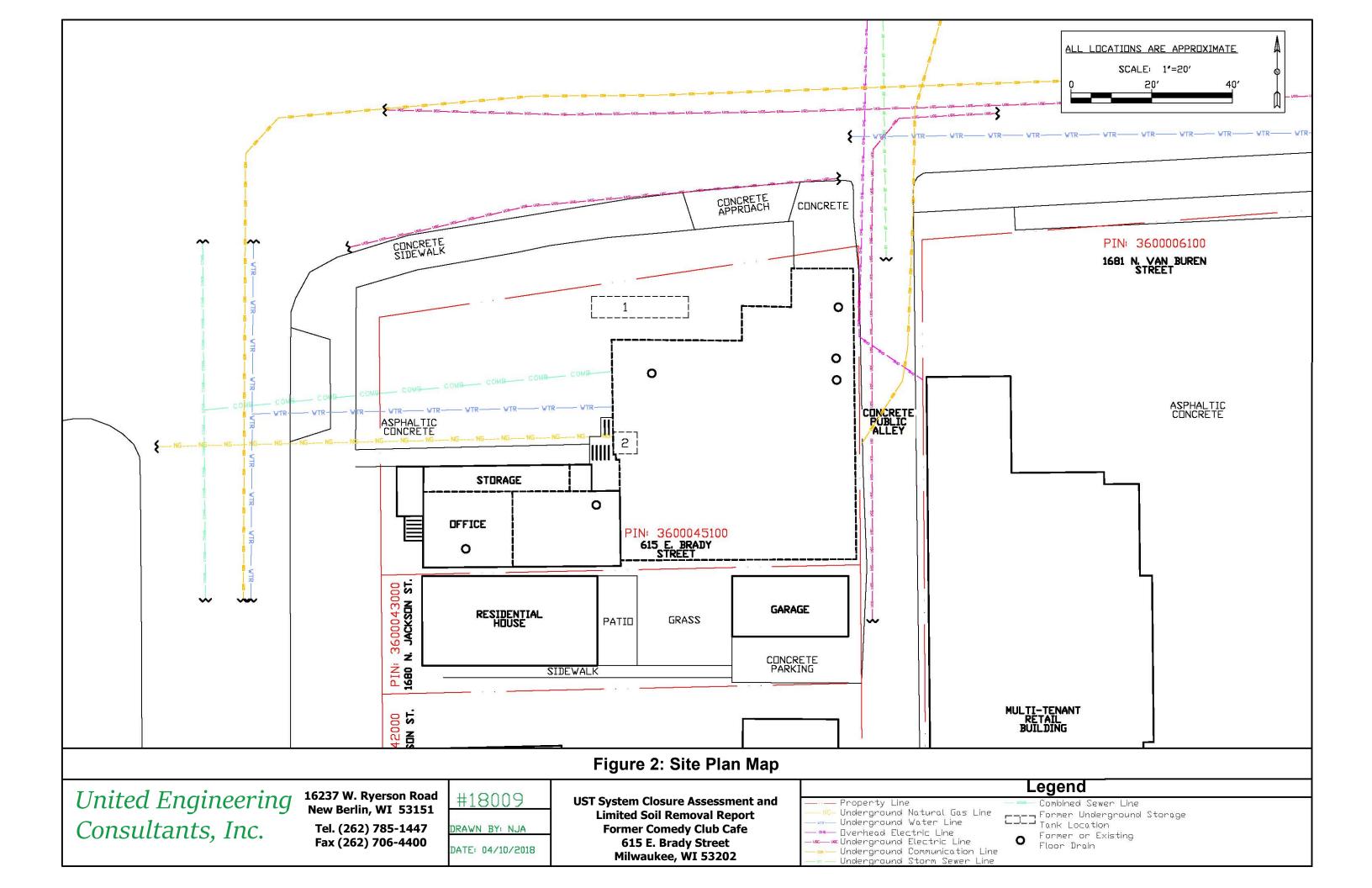
- RCL not established for this compound

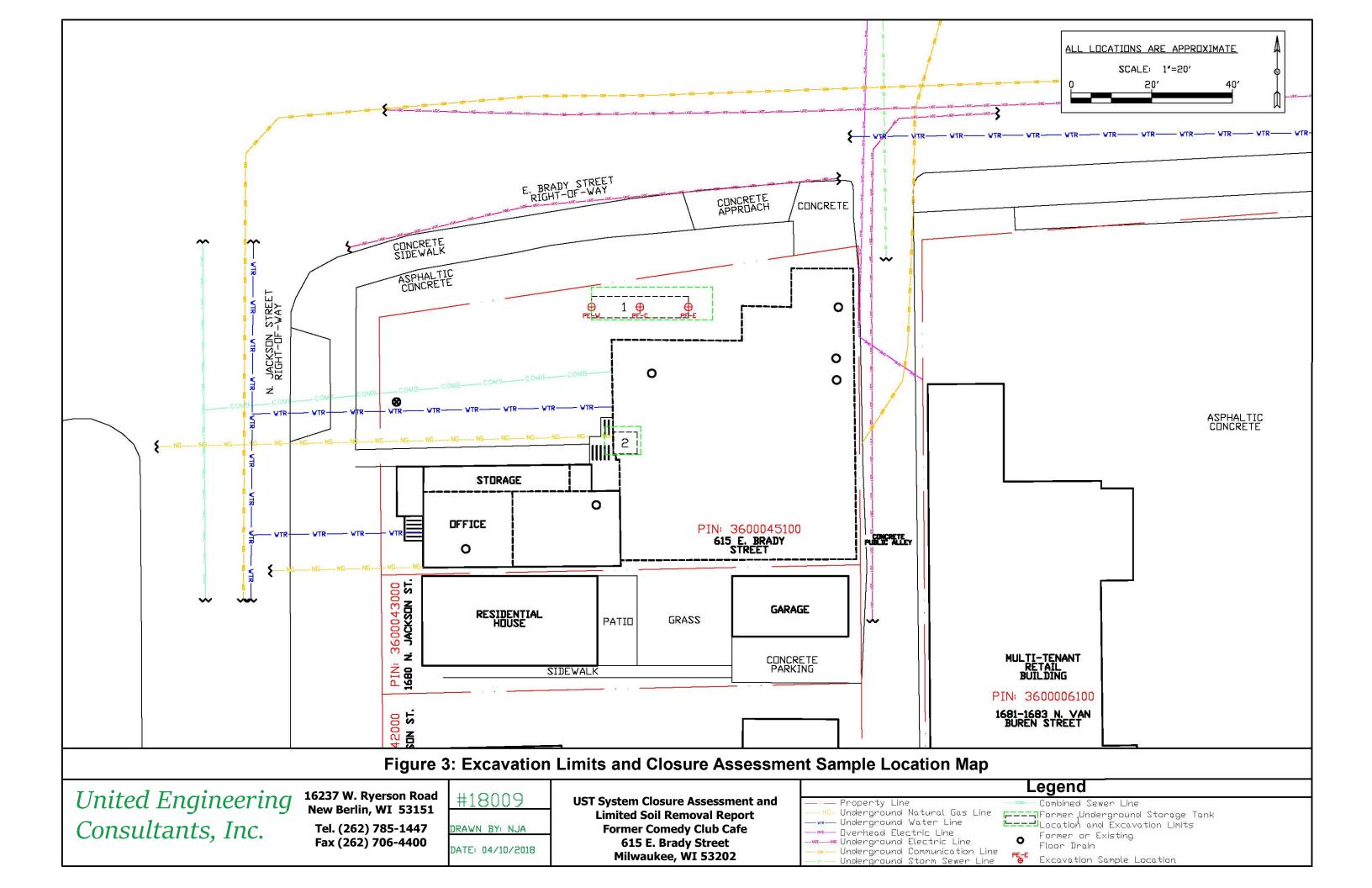
Compound not detected at or above the Method Detection Limit



## FIGURE 1 SITE LOCATION MAP











Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures

PO Box 7837 Madison, WI 53707-7837

(608) 224-4942

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TOID	<b>#:</b>
Reg (	Obj #:
Wis.	Admin. Code §ATCP 93.140

## UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Personal information you provide may be used for purposes other than that for which it was originally collected (s. 15.04(1)(m) Wis. Stats.).

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. A separate form is needed for each tank. Send each completed form to the agency designated above. Have you previously registered this tank by submitting a form? 

Yes. V.No.

tank. Send each completed form to the agency	designated above. Have you previous	usly registered ti	nis tank by submit	tting a form?   Ye	s Mo
If yes, a	are you correcting/updating information	n only? Yes	☐ No		
This registration applies to a tank status that is (check one):				· · · · · · · · · · · · · · · · · · ·	
The state of the s	ndoned with Product (empty)	☐ Closed – Fill	ed with Inert Material	is	
	ndon with Water	The second secon		v owner name in block 2	2 – attach deed)
☐ Abandoned with Product ☐ Clos	ed - Tank Removed	☐Temporarily (	Out of Service - Prov		€ Unable to the Common of the
Fire Dept. providing fire coverage where tank is located:	CITY TOWN TVILLAGE N	ILWAUKEE			
IDENTIFICATION (Please Print)					
1. TANK SITE NAME_		COUNTY		PHONE	
FORMER COMEDY C	LUB CAFE	MILWAL	IKEE	( ) -	
SITE STREET ADDRESS	•	CITY UVIL	AGE TOWN C	F: STATE	ZIP
615 E. BRADY STE	CET	MIZWA	UKEE	wı	53262
2. TANK OWNER LEGAL NAME  MTLWAUKEE HOLDINGS LLC		COUNTY		PHONE: Check C	ELL or LAND
MAILING ADDRESS	,	CITY UVIL	AGE TOWN C	F: STATE	ZIP
913 29TH STREET	•	DES MO		IIA	5031Z
3. PROPERTY OWNER NAME (if different from Tank Owner	Legal Name #2)		ent from County #2)		
,	· ·				
PROPERTY OWNER ADDRESS (if different from Site Str	eet Address #1)	CITY VIL	AGE TOWN C	OF: STATE	ZIP
4. CLASS A NAME	DOB		CERTIFICATION:		
				(	
5. CLASS B NAME	DO8		CERTIFICATION:		
	2111			- P	
SITE ID:	FACILITY ID# 341170170	*** ** ***	CUSTOMER ID#	III 6 11 6W	
Tank Capacity (gallons): 1800	Tank Age (age or date installed):	NKNOWN		Vehicle fueling: Ye	es 🗹 No
LAND OWNER TYPE (check one) Refer to back					1
County State Federal Le	ased Federal Owned Tribal	Nation LI Mi	unicipal	Other Government	Private
OCCUPANCY TYPE (check one) Refer to back	<b>—</b> • • • • • • • • • • • • • • • • • • •				•
				overnment Fleet	
	kup or Emergency Generator 🗹 C	ther (specify): RE		70 Po 1 2 A 7	
TANK CONSTRUCTION:	B : ( ) D( ) ( )				Yes No
/ \	lass Reinforced Plastic Composite		1 .		Yes W No
☐ Fiberglass ☐ Unknown ☐ Other (specify			118	ank Double Walled? [	☐ Yes W No
TANK CATHODIC PROTECTION: Sacrificial Anoc					
PRIMARY TANK LEAK DETECTION METHOD: Auton				☐ Inventory control and	tigntness testing
Manual tank gauging (only for tanks of 1,000 gallons or te		ion (SIR) UNK	nown		
PIPING CONSTRUCTION: ☐ Single Wall ☐ Double Wal			<b>5</b> 00		
☐ Bare Steel ☐ Coated Steel ☐ Fiberglass	Flexible Copper Unknown		Other:		
PIPING CATHODIC PROTECTION: Sacrificial Anodes		<del></del>			
	g with   ☐ A. Pump auto shutoff - ELL		,	■ Unknown	
Suction plping with check valve at tank	Suction piping with check valve at pun	····		ot needed if waste oil	
PIPING LEAK DETECTION METHOD: Interstitial moni					
☐ Tightness testing ☐ Electronic line monitor			ot required	☐ Unknown	
TANK CONTENTS (Current, or previous product (if tank not		☐ Unleaded	☐ Gas-ethanol	(34323000)	☐ Diesel
☐ Sio-Diesel: % ☐ Aviation ☐ Premix	☐ Fuel Oil ☐ Kerosene	☐ New Oil		ash point less than 200	
Waste/Used Motor Oil ⇒ Used for Heating	☐Hazardous Waste/Interface*	☐ Empty*	☐ Sand/Grave	e/Slurry*	cnown
Other (specify):	Chemical" Name		CAS#	50 m =1.	
* NOT PECFA eligible.	Geo Latitude: H3º 3.1641N		Geo Longitude: 8	7054.255'1	ý
If Tank Closed, Abandoned or Out of Service: 3/5/	Has a site as	sessment been co	mpleted? (see reve	erse side for details) 🗹	Yes No
TANK OWNER LEGAL NAME (glease print)  MILLATURE WALL SHOT COUNTY L	CC TANK OWNE	RE-MAIL	CT) LLANC	Im . con	1
TANK OWNER SIGNATURE (Note; By signing, signer is ac	cepting legal and financial responsibility for	the storage tank s	ystem.)	DATE:	1.0
			100	3/12	118
					f—

Note: Refer to comments on reverse side of form.

TR-WM-137 (8/17) Formerly ERS 7437 (3/13)



Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures PO Box 7837 Madison, WI 53707-7837 (608) 224-4942

FOR OFFICE USE ONLY	
TDID#:	
Reg Obj #:	
Wis Admin Code SATCP 93 14	01

## UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Personal information you provide may be used for purposes other than that for which it was originally collected (s. 15.04(1)(m) Wis. Stats.).

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. A separate form is needed for each tank. Send each completed form to the agency designated above. Have you previously registered this tank by submitting a form? 

Yes 
No

tank. Oong cash completes form to the agenc		i <del></del>	1.00	mg a rount. El roo El rio
ır yes, ı	are you correcting/updating information	on only?   Yes	3 ∐ No	
This registration applies to a tank status that is (check one):				
	ndoned with Product (empty)	Closed - Fill	led with Inert Materials	<b>S</b> .
	ndon with Water			owner name in block 2 – attach deed)
	ed - Tank Removed		Out of Service - Provi	de Date:
Fire Dept. providing fire coverage where tank is located:	CITY TOWN VILLAGE	MIWAUKEE	•	
IDENTIFICATION (Please Print)				•
1. TANK SITE NAME		COUNTY		PHONE
1. TANK SITE NAME FORMER COMEDY C	LUB CAFE	MILWAL		<u>( ) -                                  </u>
SITE STREET ADDRESS 615 E. BRADY STE		MILLWA	LAGE TOWN OF	STATE ZIP
2. TANK OWNER LEGAL NAME  MILWAUKEE HOLDINGS LLC		COUNTY		PHONE: Check C CELL or LAN
	,		LAGE TOWN OF	STATE ZIP
MAILING ADDRESS 913 29 <sup>TH</sup> STREET		DES MO		TA 50312
3. PROPERTY OWNER NAME (if different from Tank Owner	l anal Name #91		rent from County #2)	1201 ( ) ( ) ( )
of the city of owner, in the fit and only their owner,	Logar Formo HZ/	000.111 ( 0	on nom odding nzy	
PROPERTY OWNER ADDRESS (if different from Site Stre	eet Address #1)	CITY VIL	LAGE TOWN OF	: STATE ZIP
				lwi l
4. CLASS A NAME	4. CLASS A NAME DOB			Allach certificate)
5. CLASS B NAME	5. CLASS B NAME DOB			Allach certificate)
SITE ID:	FACILITY ID# 34(170170		CUSTOMER ID#	
Tank Capacity (gallons): 4000	Tank Age (age or date installed): ()]	AKNOW)V)	T <sub>1</sub>	Vehicle fueling: ☑ Yes ☐ No
LAND OWNER TYPE (check one) Refer to back	, , , , , , , , , , , , , , , , , , , ,	415100.0014	<del> </del>	
☐ Coûnty ☐ State ☐ Federal Le	ased  Federal Owned  Tribal	Nation	unicipal 🔲 (	Other Government Private
OCCUPANCY TYPE (check one) Refer to back	****	***************************************		
	☐ Industrial ☐ Residential	School	] Utility 🔲 Gov	ernment Fleet
3 × 3 × 3 × 3 × 3 × 3 × 3 × 3 × 3 × 3 ×		- The second sec	EMOVAL	Accord 2220 (1922 SO (1920 SE) 2020 (1920 SE)
TANK CONSTRUCTION:		(1-1)		erfill Protection? Yes VN
<i>₹</i> /	ass Reinforced Plastic Composite		I	erfill Protection? Yes XX N Il Containment? Yes XX N
☐ Fiberglass ☐ Unknown ☐ Other (specify)		.)-		ik Double Walled? Yes N
TANK CATHODIC PROTECTION: Sacrificial Anod				Total Control
PRIMARY TANK LEAK DETECTION METHOD: Autom			TVes TMe T	Inventory control and tightness testin
Manual tank gauging (only for tanks of 1,000 gallons or less				inventory control and agriculess testin
PIPING CONSTRUCTION: Single Wall Double Wall		ion (one) tagons	HOWIT	
	□ Flexible  □ Copper  □ Unkno	wn MINIA	Other:	
PIPING CATHODIC PROTECTION: Sacrificial Anodes			□ Offici.	
	g with ⇔ ☐ A. Pump auto shutoff ÉLL		Markey RALLY	55 ( Lalamana)
				Unknown t needed if waste oil
Suction plping with check valve at tank				i needed ii waste dii
PIPING LEAK DETECTION METHOD: Interstitial monit  Tightness testing Electronic line monitor			ot required	M Unknown
TANK CONTENTS (Current, or previous product (if tank now		☐ Unleaded	☐ Gas-ethanol b	
American state of the state of	to produce the second s			A STATE OF THE STA
Bio-Diesel:% Aviation Premix	☐ Fuel Oil ☐ Kerosene	☐ New Oil		sh point less than 200°F
☐ Waste/Used Motor Oil ⇒ ☐ Used for Heating	☐Hazardous Waste/Interface*	☐ Empty*	Sand/Grave/S	Slurry* 🗹 Unknown
Other (specify):	Chemical' Name	т.	CAS#	n m1 9 m 11.7
* NOT PECFA eligible.	Geo Latitude: 43° 3.170' N		Geo Longitude: 87	<u> </u>
If Tank Closed, Abandoned or Out of Service: 3/7/	18 Has a site as:	sessment been co	mpleted? (see revers	ne side for details) 🗹 Yes 🔲 No
TANK OWNER LEGAL NAME (please print)	LLC TANK OWNE	Shoo)	LYIOON	dm.com
TANK OWNER SIGNATURE Prote: By Joning, signer is acc	epting legal and financial responsibility for	the storage tank s	ystem.)	DATE
				1 31211

Note: Refer to comments on reverse side of form.

W27385

NON-HAZARDOUS WASTE MANIFEST	Generator ID Number	7	2. Page 1 of	3. Emergeno	y Response		4. Waste Ti	racking Nun	002	316	9
5. Generator's Name and Mai				Generator's	Site Address	(if different	than mailing addre	ess)		W 100 SON	
T. WA	ted Engine SE Brady Volver, WE	11.12									
	s E brady	0									
Generator's Phone:	mo				-		U.S. EPA ID	Number			
	FU	TURE ENVIRONI	WENTAL				WIOC	1001.22	358		
7. Transporter 2 Company Na	ime				1		U.S. EPA ID	Number			5
Designated Facility Name a	Total Control of the						U.S. EPA ID	Number	e je		
	36	OS CURTIS RD					WIR	000140	988		
Facility's Phone:	W	EST ALLIS, WI 53	214				1				
9. Waste Shipping Nar	me and Description	*		25 1	10. Conta	iners	11. Total	12. Unit			
	no and Description				No.	Туре	Quantity	Wt./Vol.			-
1. NON H	AZARDOUS, NON I	REGULATED BY	TOC		001	TT :		G			
	Viste wate	gen .					1000				
2.	V-OIE WATE	8				1	F 10				70
							3 373				
											13/3/
3.											
4.						ing was					100
13. Special Handling Instructi	ons and Additional Information						Townships .				
						-					
14. GENERATOR'S/OFFERO	OR'S CERTIFICATION: I hereby	declare that the contents of	this consignment	are fully and ad	curately des	scribed abov	e by the proper sh	nipping name	, and are classifi	ied, package	d,
marked and labeled/place Generator's/Offeror's Printed/	arded, and are in all respects in	proper condition for transpor		cable internation	onal and nati	onal govern	mental regulations	i.	Month	Day	Yea
denerator si oneror si rimedi	Typed (value	- 1 \ L		griature			and the second		1.3	17 1	10
15. International Shipments	Import to U.S.		Export from	118	Port of en	atrulovit:	A salestonic .				
Transporter Signature (for ex			Exportition	0.0.	Date leav					Service S.	
16. Transporter Acknowledge	Committee of the Commit									-	
Fransporter 1 Printed/Typed			Si	gnature	1/2	englating paja diago sistem	dymin .		Month	Day	Ye
Transporter 2 Printed/Typed	Name		Si	gnature	- the				Month	Day	Ye
									100	1 1	
17. Discrepancy					1					Transition of the second	
17a. Discrepancy Indication S	Space Quantity	Туре		□ R	esidue		Partial Re	jection		Full Rejection	on
-		A me	atr .								
17b. Alternate Facility (or Ge	nerator)		*	Manifest	Reference I	Number:	U.S. EPA ID	Number			
			, *.				J.J. ZI KID	THE INVI			
Facility's Phone:				-							
17c. Signature of Alternate F	acility (or Generator)								Month	Day	Ye
18. Designated Facility Owner	er or Operator: Certification of re	eceipt of materials covered by	the manifest exce	pt as noted in	Item 17a						
18. Designated Facility Owner Printed/Typed Name	or Operator: Certification of re	ceipt of materials covered by		pt as noted in gnature	Item 17a				Month	Day	Ye

1	NON-HAZARDOUS WASTE MANIFEST	2. Page 1 of 3.	Emergency Response	Phone 51-9421	4. Waste Tracking Number					
	5. Generator's Name and Mail	ing Address	Ge	enerator's Site Address	s (if different t	han mailing addr	ess)		P. 2519	
	6/2 8	he to the Lucture								
	Generator's Phone: 6. Transporter 1 Company Nar				Japan Co.	II S EPA ID	Number			
	o. Haroportor i company ma	FUTURE EN	VIRONMENTAL			U.S. GVACA	1001223	158		
	7. Transporter 2 Company Nar	me				U.S. EPA ID	Number			
	8. Designated Facility Name a	nd Site Address		100		U.S. EPA ID	Number		19.5	
		360 S CURT	IS RD			WIR	0001409	88		
		WEST ALLIS	. WI 53214			1			1	
	Facility's Phone:			10. Conta	pinore		T T			
	9. Waste Shipping Nam	ne and Description		No.	Туре	11. Total Quantity	12. Unit Wt./Vol.			
HOR -		ZARDOUS, NON REGULAT	ED BY DOT	001		3316	G			
GENERAL	CONTROL OF THE PARTY OF THE PAR	oil water		- F						
- GEN	2.									
	3.						700			
	4.	Water Carlotte Committee			Sec. Acres	- 126		December 1	90.90	
	1991					400				
	13. Special Handling Instruction	one and Additional Information								2000
	To, Opedial Harlandy Harlands	The direction of the state of t	The same of the sa						and the last	
									The same	
					Will be a second					
	14. GENERATOR'S/OFFERO	PR'S CERTIFICATION: I hereby declare that the traded, and are in all respects in proper condition	ne contents of this consignment are f	ully and accurately de	scribed above	by the proper sh	nipping name,	and are classifie	d, packag	ged,
	Generator's/Offeror's Printed/		Signat		nonai governii	ioniai regulationi		Month	Day	Year
*	- MIKI	MICESTA	1 X	1411	オンレ			ar l		1
TL	15. International Shipments	Import to U.S.	Export from U.S	Port of er	ntry/exit:	40.00				
INT	Transporter Signature (for exp	ports only):			ving U.S.:					
TRANSPORTER	16. Transporter Acknowledgm Transporter 1 Printed/Typed N		Signat	ure				Month	Day	Year
POR	114100 8 101				Calley !	S. C. Marine		13	3	10
ANS	Transporter 2 Printed/Typed N	Name Caracteristics	Signat	ure	1		F-11-75	Month	Day	Year
TR										
A	17. Discrepancy			Water Contract					- 17-50	
	17a. Discrepancy Indication S	pace Quantity	Туре	Residue		Partial Re	jection		Full Reject	tion
1	17b. Alternate Facility (or Gen	perator)		Manifest Reference	Number:	U.S. EPA ID	Number			
5	170. Alternate Pacifity (of Geri	ididioij				U.S. EFAID	Number			
FACI	Facility's Phone:					1				
ED	17c. Signature of Alternate Fa	acility (or Generator)					14.9	Month	Day	Year
INA										
DESIGNATED FACILITY										
O -										
	18. Designated Facility Owner	r or Operator: Certification of receipt of materia	Is covered by the manifest excent as	noted in Item 17a						
	Printed/Typed Name	and the state of t	Signal	Manager of the State of the Sta				Month	Day	Year
*									100	

1	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number		mergency Response		4. Waste Tra	acking Nun	002	30	30
	5. Generator's Name and Maili	ng Address	Gen	erator's Site Address	(if different than	n mailing addre	ss)			
	Generator's Phone:	ng Address  bi Address  in the second to the								
		FUTURE ENVI	RONMENTAL.	K The second		U.S. EPA ID N	lumber	358	6/	3.
	7. Transporter 2 Company Nan			94 - H		U.S. EPA ID N				
	Designated Facility Name are     Facility's Phone:	ad Site Address  360 S CURTIS  WEST ALLIS, \			2 a)	U.S. EPA ID N	Number	988		
	9. Waste Shipping Nam	e and Description		10. Contai	ners Type	11. Total Quantity	12. Unit Wt./Vol.			
GENERATOR -		CARDOUS, NON REGULATED	DBY DOT	001	Π -	2000	G			
- GEN	2.	56								
	3.		1,		1					
	4.	MANH CORDEO	j. jen							
1	13. Special Handling Instruction	THE THE STATE OF T	y make the second							
									Aug.	
	14. GENERATOR'S/OFFEROI marked and labeled/placare	R'S CERTIFICATION: I hereby declare that the coded, and are in all respects in proper condition for	ontents of this consignment are ful transport according to applicable	ly and accurately des international and nation	cribed above by onal governmen	the proper shi ntal regulations.	pping name	e, and are classifie	ed, packag	ged,
Y	Generator's/Offeror's Printed/T	yped Name	Signatu	MAN 1	1			Month 2	Day	Year
INT.	15. International Shipments  Transporter Signature (for expire)	Import to U.S.	Export from U.S.	Port of en Date leavi						
Si Cilia	16. Transporter Acknowledgme	ent of Receipt of Materials	Signatu					Month	Day	Voor
POR	Transporter 1 Printed/Typed N		Signatu	that 200	trese,			Month	Day	Year
TRANSPORTER	Transporter 2 Printed/Typed N	ame	Signatu	re l		n P		Month	Day	Year
Ā	17. Discrepancy									
	17a. Discrepancy Indication Sp	pace Quantity	Туре	Residue		Partial Rej	ection		Full Rejec	tion
- YI	17b. Alternate Facility (or Gene	erator)	1784	Manifest Reference N	lumber:	U.S. EPA ID I	Number			
FACILI	Facility's Phone:									
ATED	17c. Signature of Alternate Fac	cility (or Generator)						Month	Day	Year
- DESIGNATED FACILITY										
		or Operator: Certification of receipt of materials of					S Sensole			
¥	Printed/Typed Name		Signatu	e		70.		Month	Day	Year

## SPECIAL WASTE MANIFEST DISPOSAL TICKET

EMERALD PARK LANDFILL, LLC

BILL TO:

TRANSPORTER:

GENERATOR:

GENERATOR:

WASTE DESCRIPTION:

PROFILE #:

Date

Date

Date

Date

Date

Date

WHITE & YELLOW - TRANSPORTER COPY / PINK - DISPOSAL SITE COPY / GOLD - GENERATOR COPY

Date

TRUCK NO.

DRIVER'S SIGNATURE:

EPI-001-94

Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures

P.O. Box 7837, Madison, WI 53707-7837

(608) 224-4942

Wis. Admin. Code §ATCP 93.560

FOR OFFICE USE ONLY

THE OWNER OF THE OWNER,		01/0 TEL	SERVICE	A DIM O			A R PERSON IN IL HOUSE	
	ARIL	CVCILINA	C.L.DIII. L	V WILL V .	MOIDE	VECFE	TARLE I	
200	HIVE		TERVILLE	AIVIII			NIVIENI	REPLIE
	11417	OIOILIN	CLIVAIOL	AIL O	LOCUILL	ACCEOC		IVEI OIVI

		vide may be used f		r than that for w	hich it wa	as originally colle	ected (s. 15	.04(1)(m) Wis. Sta	ats.).	
		Each System Se		01150145115		-11				
		FORM THAT DO			'N/A' B	OX				
CHECK ON	E: V UNDE	ERGROUND [	_ ABOVEGRO	UND						
Part A - To	be complete	d by contractor	performing re	pair or closu	re					
A. TYPE OF S	ERVICE Z	CLOSURE   F	REPAIR/UPGRAD	E CHAN	IGE-IN-S	ERVICE				
Indicate	portion of syste	em being serviced if	a repair, upgrade	or change-in-	service is	being performed	d			
Remo	ote fill  Tani	k Piping T	ransition/contains	ment sump	Spill b	oucket Dis	penser			
B. IDENTIFIC										
OWNER INFOR	MATION									
OWNER NAME			CONTACT NA	ME			TITLE			
MILWAUKE	E HOLDING	GS LLC	JOSHU	AIVEY			OWN	ER		
MAILING ADDR	ESS					Y D TOWN D	VILLAGE		STATE	ZIP
	" STREE	T			DES	MOTNES			IA	50312
TELEPHONE:						E-MAIL				
(319) 530-02						Joshawo	olysdm	com		
SITE INFORMA										
FACILITY NAME										
		CLUB CAFE			I ROZOIT	Y D TOWN D	VALLAGE		TOTATE I	710
615 E.		ALBECT.				LWAUKE			STATE	53202
	BRADY FRACTOR INFO			Company of the compan	11.0	LWAUKE	=		MT	33202
		TOR Section A Above					TEL	EPHONE:	CELL:	
		ERING CONS	UITANTE .	TAV			25	0785-1447	( )	
STREET ADDRE			<u> </u>		₩ CIT	Y D TOWN D			STATE	ZIP
16237	W. RYE	RSON ROA	D		NE	W BER	LIN		WI	53151
C. TANK SYS	TEM DETAIL (	Complete for all s	ervice activities)							
а	b	С	d	е	f		g		h	
Tank ID#	Type of	Tank Material	Piping Material	Tank	Contents		- System	If "Yes" to "g'		
	Closure <sup>1</sup>	of Construction	of Construction	(gallons)			ompromised es, cracks,	d and Ca	use of Rele	ease <sup>5</sup>
				(5)		-loose conn		? Source of Relea	se <sup>3</sup> Caus	se of Release4
1	ρ	5	NA	1000	WO	Yes	□ No	Т		1
					•••	☐ Yes	□No			
						☐ Yes	□ No			
						☐ Yes	□ No			
						☐ Yes	□ No			
		<u> </u>				☐ Yes	□ No			
1 Indicate t	mo of alactics	P = Permanent, To	08 = Tompound	Out of Carda	CID -	Closure in Dia-				
	-									
		DL = Diesel, LG =								
	e, PX = Premix name(s):	, WO = Waste/Use	a Motor Oil, FCF	12vv = Flamma	ble/Comb	oustible Hazardo	us vvaste,	OC = Other Chen	nicai (indic	ate the
CHETHICA	Harrie(s).									
3. CAS num	per(s):		*							
4. Source of	release: T = ta	ank, P = piping, D	= dispenser, STF	= submersible	turbine p	pump, DP = deli	ivery proble	em, O = other, U	NK = Unk	nown
5. Cause of	elease:									
S = spill,	O = overfill, F	POMD = physical or	mechanical dama	age, C = corro	sion, IP =	installation pro	blem, O =	other, UNK = Uni	known	
6. Has releas	se been reporte	ed to the Departmen	nt of Natural Reso	ources? Y	es 🗆 N	No ☐ Release	not evider	nt at this time		
		Part A Dist	tribution: DAT	CP DNR	Inspect	tor Contract	or Own	ner		

TR-WM-140 (8/17) Formerly ERS-8951 (7/13)								
D. CLOSURES (Check applicable box at right in response to all state	tements in sectio	n D)						
Written notification was provided to the local agent 5 days in advance of	closure date. [	Yes No						
All local permits were obtained before beginning closure.  Yes	No DNA							
☑ UST Form TR-WM-137 or ☐ AST Form TR-WM-118 filed by own	ner with the DATC	P indicating closu	re. [	7 Yes	□No	Г	] NA	
NOTE: TANK INVENTORY FORM TR-WM-137 or TR-WM-118 SIGNED					-	-		
WITH EACH CLOSURE or CHANGE-IN-SERVICE CHECKLIST								
D.1 TEMPORARILY OUT-OF-SERVICE			Rei	mover	Inspec	tor	Inspector Not	
Product removed.				rified	Verifie		Present	NA
a. Product lines drained into tank (or other container) and liquid remo	oved, and		ПУ	ΠN	DYD	IN		
b. All product removed to bottom of suction line, OR				ΠN	OYE	A CONTRACTOR	Ö	
c. All product removed to within 1° of bottom.				ON		Marine o house		
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor rel	lum lines conned			# 28 miles in the contract of				
		20	No. of the last of		DYC		<u></u>	
All product lines at the islands or pumps located elsewhere are remo	ved and capped,	JR			are in the second	JN:	<u> </u>	
4. Dispensers/pumps left in place but locked and power disconnected				$\square$ N	T19	] N		
5. Vent lines left open.			$\square$ Y		Water and the second	]N		
6. Inventory form filed indicating temporarily out-of-service (TOS) closure	re.		$\square$ Y		DYC	JN		
D.2. CLOSURE BY REMOVAL OR IN-PLACE	1 ( ) X		,					
General Requirements			V Y	DN	OY D	N		
<ul> <li>a. Product from piping drained into tank (or other container).</li> </ul>			$\square$ Y	DN	DYD	JN		Ø
b. Piping disconnected from tank and removed.		The second secon	ΠY	ON	DYC	JN		Ø
c. All liquid and residue removed from tank using explosion-proof put	mps or hand pum	DS.	MY	CATALON SON THE		₫N		
d. All pump motors and suction hoses bonded to tank or otherwise gr	rounded.		MY	S62000 No.		N	Ö	
e. Fill pipes, gauge pipes, vapor recovery connections, submersible p	pumps and other f	ixtures removed.			DYD			Ø
f. Vent lines left connected until tanks purged.				proper spiral control control control		-		M
g. Tank openings temporarily plugged so vapors exit through vent.			10.00			State Car (100 Star)		Q
h. Tank atmosphere reduced to 10% of the lower flammable range (L	FL) - see Section	F	1		ve meganinak di		The state of the s	
Specific Closure-by-Removal Requirements	100 00000	No. 1	LT I	LJ IN	DYE	5 IN	. Ц	
Tank removed from excavation after PURGING/INERTING; placed	d on lovel around	and blooked to	1	***				
prevent movement.	u on level ground	and bioched to	My	$\square$ N	DYE	N		
b Tank cleaned before being removed from site.			MX	ON	ПУБ	KN		
c. Tank labeled in full compliance with API 1604 after removal but be	fore being moved	from site.	VY	ΠN	DYE			
NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING A	GAINST REUSE	FORMER CONTE	NTS:					house
VAPOR STATE: VAPOR FREEING TREATMENT; MONTH/DAY/								
d. Tank vent hole (1/8" in uppermost part of tank) installed prior to me	oving the tank from	n site.	V	$\square$ N	DYG	YN.		
e. Site security is provided while the excavation is open.		(a) (b) (b) (c) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	ďΥ	$\square$ N	DYE	KN		
Specific Closure-In-Place Requirements			OY	DN	DYC	] N		
NOTE: CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR	R WRITTEN APPI	ROVAL OF		#- III			The second second second	
THE DEPARTMENT OF AGRICULTURE, TRADE AND CONSUM	MER PROTECTIO	N (DATCP) OR L	OCAL	AGEN	<i>T</i> .			
a Tank properly cleaned to remove all sludge and residue.			$\square$ Y	$\square$ N	DYC	JN		
b. Solid inert material (sand, cyclone boiler slag, or pea gravel recomm	ended) introduced	and tank filled.	ΠY	DN	DYC	JN		
c. Vent line disconnected or removed.			ПΥ	DN	DYC	IN		
d. Inventory form filed by owner with the DATCP indicating closure in	-place	and the second s	reduces.	ON	DYC			
E REPAIR, UPGRADE OR CHANGE-IN-SERVICE				Mary and Art Sec		Santan a	· · · · · · · · · · · · · · · · · · ·	Securit
Written notification was provided to the local agent 5 days in advance	of service date		ΠV	□N	□ NA			
All local permits were obtained before beginning service.	O SGI VICE GAIG.				□ NA			
	dination about the		enem.	and the same				
Form TR-WM-137 or 0 TR-WM-118 filed by owner with the DATCP in	lacating change-ii	i-service.	LIY	UN	□ NA			
F. METHOD OF VAPOR FREEING OF TANK								
Displacement of vapors by eductor or diffused air blower.		4 -1-1						
Eductor driven by compressed air, bonded and drop tube left in place	; vapors discharge	a minimum of 12	ieet a	pove gr	ound.			
☐ Inert gas using dry ice or liquid carbon dioxide.								
☐ Inert gas using CO2 or N2 NOTE: INERT GASSES PRODUCE A ACCURATELY. THE TANK N								N
Gas introduced through a single opening at a point near the bottom of	f the tank at the er	nd of the tank oppo	site t	he vent				
Gas introduced under low pressure not to exceed 5 psig to reduce sta	atic electricity. Ga	s introducing device	e gro	unded.				
Readings of 10% or less of the lower flammable range (LEL) or <5					round.			
Tank atmosphere monitored for flammable or combustible vapor le								
Calibrate combustible gas indicator and/or oxygen meter prior to us nottom, middle and upper portion of tank.	Part of the second				here. Tan	k spa	ice monitored a	l
Distribution: DATCP DNF	R Inspector	Contractor (	Dwne	ər				

TR.WM-140 (10/17) Formerly ERS-8961

## G. REMOVER/CLEANER INFORMATION

NICHOLAS ANDERSON

REMOVER/CLEANER NAME (PRINT).

Lattest that the procedures and information which I have provided as the tank closure contractor are correct and comply with ATCP 93.

Company expected to perform soil contamination assessment UNITED ENGINEERING CONSULTANTS, INC.

H. INSPECTOR INFORMATION

John Yarcho John Yascho 467298 INSPECTOR NAME (PRINT): INSPECTOR SIGNATURE SIGNATURE

ON WHERE INSPECTION PERFORMED

INSPECTOR NOTES:

LPO AGENCY #

3.20 18 DATE SIGNED

TR-WM-140 (10/17)) 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. FORMER COMEDY CLUB CAFE CITY TOWN VILLAGE SITE ADDRESS (Not PO Box) STATE ZIP WF 5320 MILWAUKEE 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? XY If yes, provide the DATCP # or DNR BRRT's # 02-41-5530 b. Number of active tanks at facility prior to completion of current services: USTS (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 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)? b. Petroleum odor: ✓ Yes ☐ No c. Water In excavation/trench: Yes YNo a. Stained soils: 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 b. Indicate type of geology<sup>2</sup> BROWN SILTY CLAY 4. Receptors a. Water supply well(s) within 250 feet of the facility? Yes MNO 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

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

Sample ID #	Sample Location & Soil/Geologic Description	S	ample Colle	ction Meth	od	Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
								1	
								-	15.4
									76.62
								1 1 1 1 1 1	

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

		INFORMATION

As a tank-system site assesso	r certified under Wis. Admir	. Code section SPS 305	.83, it is my opinior	n that there is no inc	dication of a release	of a regulated
substance to the environment.						

		y result in forfeitures of a minimum of \$10 and a maximum of \$5000 fe	or
each violation under Wis. Stats. Section 168.26 (5	). Each day of continued violation	and each tank are treated as separate offenses.	
	11 11	11	

TANK-SYSTEM SITE ASSESSOR NAME (PRINT):

NICK ANDERSON

TANK-SYSTEM SITE ASSESSOR TELEPHONE NUMBER

Distribution: DATCP DNR Inspector Contractor

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

Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures

Personal information you provide may be used for purposes other than that for which it was originally collected (s. 15.04(1)(m) Wis. Stats.).

P.O. Box 7837, Madison, WI 53707-7837

(608) 224-4942

Wis. Admin. Code §ATCP 93.560

FOR OFFICE USE ONLY

## TANK SYSTEM SERVICE AND CLOSURE ASSESSMENT REPORT

Complete On	e Form for	Each System Se	rvice Event							
FOR PORTIO	NS OF THE	FORM THAT DO	NOT APPLY.	CHECK THI	E 'N/A' BOX					
CHECK ONE:			ABOVEGRO							
		d by contractor			ire					
A. TYPE OF SE	RVICE	CLOSURE R	EPAIR/UPGRAD	E CHA	NGE-IN-SERV	/ICE				
Indicate po	ortion of syste	m being serviced if	a repair, upgrade	or change-in	-service is being	ng performed				
Remote	e fill 🔲 Tank	⟨ □ Piping □ T	ransition/containn	ment sump	☐ Spill bucke	et Dispens	er			
B. IDENTIFICA	TION									
OWNER INFORM	IATION				# ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (					
OWNER NAME			CONTACT NAI			TITLE				
MILWAUKE		es llc	JOSHUA	Y IVEY			UNER			
MAILING ADDRES						TOWN VILLA	AGE		STATE	
413 29TA	SIKEET					MOTNES			ITA	50312
(319) 50-025	70				E-M/	osh () wooly	sdm.co	m		
SITE INFORMAT					13	73116	30111			
FACILITY NAME										
FORMER	COMEDY	CLUB CAFE		,						
SITE ADDRESS (	Not PO Box)				CITY [	TOWN UVILLA	AGE		STATE	ZIP
615 E.	BRADY	STREET			MILL	WAUKEE			MI	53202
SERVICE CONTR									_	
		FOR Section A Above					TELEPHO		CELL:	
VNITED	NGINEE	ERING CONS	ULTANTS,	INC.	Thomas of	Trouble Flate		5-1447	( )	-
STREET ADDRES		Basil Cal	^			TOWN VILLA			STATE	
		RSON ROA			NEW	BERLI	LN		MI	53151
		Complete for all s								
a Tank ID#	b Type of	c Tank Material	d Piping Material	e Tank	Contents <sup>2</sup>	g Release - Sys	etem I	f "Yes" to "g"	h Then Sn	acify Source
Tallk ID#	Closure <sup>1</sup>	of Construction	of Construction	Capacity	Contents	Integrity Compr			use of Re	
	P			(gallons)		(e.g. holes, cr		(0.1	1 0	45.1
		3	NA			-loose connectio		urce of Relea	se Cau	se of Release <sup>4</sup>
	P	5	NA	4000	16/06	Yes 🗆	No	1		2
						☐ Yes ☐	No			
						☐ Yes ☐	No			
						☐ Yes ☐	No			
						☐ Yes ☐				
						☐ Yes ☐				
						□ 165 □	140			
1 Indicate tvr	ne of closure:	P = Permanent, T	OS = Temporarily	/ Out-of-Servi	ce CIP = Clo	sure In-Place				
		DL = Diesel, LG =					GH = Gnoo	hol AE - A	dation Eu	ol V –
		x, WO = Waste/Use								
chemical									,	
							T			
3. CAS numb	er(s):									
4. Source of r	release: T = t	ank, P = piping, D	= dispenser, ST	P = submersit	ole turbine pun	np, DP = delivery	problem, (	) = other, U	JNK = Un	known
5. Cause of re								100		
		POMD = physical or		/	rosion, IP = in	stallation problem	n, O = other	, UNK = Un	known	
6. Has releas	e been report	ed to the Departme	nt of Natural Res	ources?	Yes No	☐ Release not	evident at t	his time		
		Part A Dis	stribution: DAT	CP DNR	Inspector	Contractor	Owner			

5R-WM-140 (8/17) Formarly ERS-8951 (7/13)						
D. CLOSURES (Check applicable box at right in response to all statements in section D)						
Written notification was provided to the local agent 5 days in advance of closure date.  Yes  No						
All local permits were obtained before beginning closure. ☐ Yes ☑ No ☐ NA						
☑ UST Form TR-WM-137 or ☐ AST Form TR-WM-118 filed by owner with the DATCP indicating clo	sure. [	] Yes		No [	□NA	
NOTE: TANK INVENTORY FORM TR-WM-137 or TR-WM-118 SIGNED BY THE OWNER MUST BE SUI WITH EACH CLOSURE OF CHANGE-IN-SERVICE CHECKLIST	BMITTEL	)				
D.1 TEMPORARILY OUT-OF-SERVICE  1. Product removed		nover rified		ector	Inspector Not Present	N
a. Product lines drained into tank (or other container) and liquid removed, and	DY	DN	DY	DN		С
b. All product removed to bottom of suction line, OR	DY	DN	DY	Access		Г
c. All product removed to within 1" of bottom.	ПΥ	ON	ПY	ON		Г
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.	insertial	DN	П	desires		Г
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR	ПΥ	The same of the sa	П		ō	Г
Dispensers/pumps left in place but locked and power disconnected.	DY	general .	ПΥ	- James		Г
5. Vent lines left open.			In his state of	ON		Г
6. Inventory form filed indicating temporarily out-of-service (TOS) closure.	ΠY	ON	OY			Г
D.2. X CLOSURE BY REMOVAL OR IN-PLACE	- Bund	Same 1		head	Sectored	-
1. General Requirements	MY	ПИ	ПУ	PUN		(*
Product from piping drained into tank (or other container).	ΠY	ΠN	ПΥ			Œ
b. Piping disconnected from tank and removed.	ПУ	ΠN	ПΥ	ON	ō	N
c. All figuid and residue removed from tank using explosion-proof pumps or hand pumps.	15X Y	ΠN	ПУ	MN		
d. All pump motors and suction hoses bonded to tank or otherwise grounded.	BY		ПΥ	BN		
e Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed		ПN	ПУ	BN		Г
Vent lines left connected until tanks purged.	OY	DN	DY	Пи		W
g. Tank openings temporarily plugged so vapors exit through vent	D.Y	DN	DY	DN		N
h. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E.	MY	ON	DY	MN		C
2. Specific Closure-by-Removal Requirements						
a Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to	NV	ΠN	ПУ	MN		_
prevent movement.	4	,				- Breat
<ul> <li>b Tank cleaned before being removed from site.</li> <li>c. Tank labeled in full compliance with API 1604 after removal but before being moved from site.</li> </ul>	X	UN	ПХ	8 N		L
NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE: FORMER CON	TENTS:	LIN	LIY	S-N		-
VAPOR STATE; VAPOR FREEING TREATMENT: MONTH/DAY/YEAR OF REMOVAL	IENIS,					
d Tank vent hole (1/8" in uppermost part of tank) installed prior to moving the tank from site.	MY	ON	DY	MN		
e. Site security is provided while the excavation is open.	MY	□N	DY	EKN		C
Specific Closure-In-Place Requirements	ΠY	$\square$ N	DY	ΠN		
NOTE: CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF AGRICULTURE. TRADE AND CONSUMER PROTECTION (DATCP) OF	RLOCAL	AGEN	IT.			
a Tank properly cleaned to remove all sludge and residue.	DY	$\square$ N	DY	$\square$ N		
<ul> <li>Solid inert material (sand, cyclone boiler slag, or pea gravel recommended) introduced and tank filled.</li> </ul>	DY	$\square$ N	DY	$\square$ N		
c. Vent line disconnected or removed.	ΠY	$\square$ N	ΠY	$\square$ N		
d Inventory form filed by owner with the DATCP indicating closure in-place.	□Y.	$\square$ N	$\square$ Y	$\square$ N		
E. REPAIR, UPGRADE OR CHANGE-IN-SERVICE						
Written notification was provided to the local agent 5 days in advance of service date.	ΠY	$\square$ N	□ NA			
All local permits were obtained before beginning service.	DY	DN	□NA			
Form TR-WM-137 or 0 TR-WM-118 filed by owner with the DATCP indicating change-in-service.	□ Y	$\square$ N	□ NA			
F. ME/THOD OF VAPOR FREEING OF TANK						
Displacement of vapors by eductor or diffused air blower.						
Eductor driven by compressed air, bonded and drop tube left in place, vapors discharged minimum of	12 feet al	oove g	round.			
☐ Inert gas using dry ice or liquid carbon dioxide.						
☐ Inert gas using CO2 or N2 NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOS ACCURATELY. THE TANK MAY NOT BE ENTERED IN THIS						N
Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank of			l.			
Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing de						
Readings of 10% or less of the lower flammable range (LEL) or <5% oxygen obtained before remov			round.			
Tank atmosphere monitored for flammable or combustible vapor levels prior to and during cleaning. Calibrate combustible gas indicator and/or oxygen meter prior to use. Drop tube removed prior to combustion, middle and upper portion of tank.		1000	here T	ank sp	ace monitored a	at
bottom. Intellig and apper pointers or tank.						

Distribution: DATCP DNR Inspector Contractor Owner

TR-WW-140 (10/17) Fermeny ERS-8951

G. REMOVER/CLEANER INFORMATION

NICHOLAS ANDERSON

REMOVER/CLEANER NAME (PRINT):

Meh Adopper

REMOVER CLEANER SIGNATURE

412217 CERTIFICATION NO

DATE SIGNED

Lattest that the procedures and information which I have provided as the tank closure contractor are correct and comply with ATCP 93.

Company expected to perform soil contamination assessment

UNITED ENGINEERING CONSULTANTS, INC

H. INSPECTOR INFORMATION

John Yarcho

NSPECTOR SIGNATU

467298

INSPECTOR CERTIFICATION NO

LPO AGENCY #

4020

FDID # FOR LOCATION WHERE INSPECTION PERFORMED

INSPECTOR NOTES:

INSPECTOR TELEPHONE NI MADER

DATE SIGN

TR-WM-140 (10/17)) 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. FORMER COMEDY CLUB CAFE CITY | TOWN | VILLAGE STATE ZIP SITE ADDRESS (Not PO Box) 6/5 E. BRADY STREET MILWAUKEE WI 53202 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? or DNR BRRT's # 02-41-553 If yes, provide the DATCP # b. Number of active tanks at facility prior to completion of current services: USTs (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 30 9 10

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)? c. Water In excavation/trench: 

✓ Yes 

No Yes No b. Petroleum odor: ✓ Yes ☐ No a. Stained soils: d. Free product in the excavation/trench: ☐ Yes ☑ No 

a. Follow the procedures detailed in ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND

3. Geology/Hydrogeology a. Depth to groundwater ~32.5 feet 4. Receptors

b. Indicate type of geology<sup>2</sup> BROWN STLTY CLAY

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: 

MILWAUKEE RIVER

5. Sampling

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

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

Sample ID #	Sample Location & Soil/Geologic Description	Si	ample Colle	ction Meth	od	Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
PE-E	BROWN CLAYEY SILY	0				2	NΔ	NA	NA
PE-C	(	0				2	NA	(	1
PE-W	<b>1</b>	0				2	ND	1	1
						·			

#### 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
PE-E	438.6	446.3	425.2	466.3	4426/425.0	453.6	165
PE-C	438.6	446.3	425.2	466.3	442.6/425.0		116
PE-W	438.6	446.3	425.2	466.2	442.6k25.0	THE RESIDENCE OF THE PARTY OF T	134
					,		
						No.	

K.	TANK-SYSTEM	SITE	ASSESSMENT	<b>INFORMA</b>	TION

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

NICHOLAS ANDERSON /
---------------------

Auh Mulle

412216

CERTIFICATION NO

TANK-SYSTEM SITE ASSESSOR NAME (PRINT):

TANK-SYSTEM SITE ASSESSOR SIGNATU

1447 3

UNITED ENGINEERING CONSULTANTS, INC.

NK-SYSTEM SITE ASSESSOR TELEPHONE NUMBER DATE SIGNE

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

Distribution: DATCP DNR Inspector Contractor Owner

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.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

## **Analytical Report**

Timothy J. Anderson United Engineering Consultants, Inc. 16237 W. Ryerson Road New Berlin, WI 53151 March 29, 2018

Work Order: 18C0468

RE: Waste Characterization

18006/18009

Dear Timothy J. Anderson:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,

Katherine Langfoss Project Manager 847.967.6666

klangfoss@emt.com

Approved for release: 3/29/2018 12:11:22PM

Harry Last

Approved by,

Matthew Gregory Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Wisconsin Dept of Natural Resources, Cert No. 999888890

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## **Sample Summary**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-615	18C0468-01	Soil	03/07/18 11:00	03/13/18 17:15
FO-BROADWAY	18C0468-02	Soil	03/08/18 12:00	03/13/18 17:15
PE-E	18C0468-03	Soil	03/07/18 10:45	03/13/18 17:15
PE-C	18C0468-04	Soil	03/07/18 10:50	03/13/18 17:15
PE-W	18C0468-05	Soil	03/07/18 10:55	03/13/18 17:15

8100 N. Austin Avenue Morton Grove, IL 60053-3203 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 www.emt.com

## **Case Narrative**

Client: United Engineering Consultants, Inc. Date: 03/29/2018

Project: Waste Characterization

18006/18009

Work Order: 18C0468

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

#### Work Order: 18C0468

The samples were received on 03/13/18 17:15. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was

<u>Cooler</u> <u>Temp C°</u> Default Cooler 2.0

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

## Version 2.

This is a revised report with total VOC reported for Sample -01, SP-615, per client request.

#### GC/MS Semivolatiles

Method: 8270D\_SVOC\_TCLP, B8C0637-BS1: The recovery for two compounds in the blank spike were below the laboratory control limit, However, the BSD recoveries were within acceptable laboratory control limits.

Method: 8270D\_SVOC\_TCLP, B8C0637-BS1/BSD1: The relative percent difference (RPD) for two spike compounds were outside of the 20% limit. However, the compounds in question were not detected in the sample.

## **Client Sample Results**

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: SP-615

Report Date: 03/29/2018

Collection Date: 03/07/2018 11:00

Matrix: Soil

		EMT								
Analyses	Result	Reporting Limit	Qual		eg mit l	MDL	Date/Time Analyzed	Batch	Analyst	DI
Metals by ICP-AES										
Method: SW	6010C / SW301	5 / SW1311								
Lead, TCLP	< 0.0140	0.0500		mg/L	5 (	0.0140	03/15/18 19:41	B8C0526	GJ1	1
Wet Chemistry										
Method: SM	2540G									
Total Solids	88.0	0.100	Н	% (Percent)	0.	00700	03/27/18 17:10	B8C0934	JJ2	1
Volatile Organic Compoun	ds by GC/MS									
Method: SW	8260B / SW5030	) / SW1311								
1,1-Dichloroethene, TCLP	< 0.00585	0.0200		mg/L	0.	00585	03/22/18 07:21	B8C0737	JL	1
1,2-Dichloroethane, TCLP	< 0.00725	0.0400		mg/L	0.	00725	03/22/18 07:21	B8C0737	JL	1
1,4-Dichlorobenzene, TCLP	< 0.00430	0.0200		mg/L	0.	00430	03/22/18 07:21	B8C0737	JL	1
2-Butanone, TCLP	< 0.0477	0.200		mg/L	(	0.0477	03/22/18 07:21	B8C0737	JL	1
Benzene, TCLP	< 0.00470	0.0200		mg/L	0.	00470	03/22/18 07:21	B8C0737	JL	1
Carbon tetrachloride, TCLP	< 0.00425	0.0200		mg/L	0.	00425	03/22/18 07:21	B8C0737	JL	1
Chlorobenzene, TCLP	< 0.00305	0.0200		mg/L	0.	00305	03/22/18 07:21	B8C0737	JL	1
Chloroform, TCLP	< 0.00650	0.0400		mg/L		00650	03/22/18 07:21	B8C0737	JL	1
Tetrachloroethene, TCLP	0.00675	0.0200	J	mg/L		00510	03/22/18 07:21	B8C0737	JL	1
Trichloroethene, TCLP	< 0.00450	0.0200	-	mg/L		00450	03/22/18 07:21	B8C0737	JL	1
Vinyl chloride, TCLP	< 0.00525	0.0200		mg/L		00525	03/22/18 07:21	B8C0737	JL	1
Surrogate: Dibromofluoromethane				Recovery: 111%		: 78-119	03/22/18 07:21	B8C0737	JL	1
Surrogate: 1,2-Dichloroethane-d4				-		: 71-136	03/22/18 07:21	B8C0737	JL	1
Surrogate: Fluorobenzene, TCLP	, ICLP			Recovery: 131%		: 81-114	03/22/18 07:21	B8C0737	JL	1
•				Recovery: 98%			03/22/18 07:21	B8C0737	JL	1
Surrogate: Toluene-d8, TCLP	TOLD			Recovery: 91%		: 85-116				
Surrogate: 4-Bromofluorobenzene				Recovery: 102%		: 79-119	03/22/18 07:21	B8C0737	JL	1
Surrogate: 1,2-Dichlorobenzene-c		ND DUDI	F147.4.4	Recovery: 106%	Limits	:: 80-120	03/22/18 07:21	B8C0737	JL	1
	-846 8260B/WD		-FW-14							
1,1,1-Trichloroethane	< 25.0	25.0		ug/Kg dry		23.7	03/28/18 18:58	B8C1040	JL 	50
1,1,2,2-Tetrachloroethane	< 25.0	25.0		ug/Kg dry		22.9	03/28/18 18:58	B8C1040	JL 	50
1,1,2-Trichloroethane	< 25.0	25.0		ug/Kg dry		23.5	03/28/18 18:58	B8C1040	JL 	50
1,1-Dichloroethane	< 35.6	35.6		ug/Kg dry		35.6	03/28/18 18:58	B8C1040	JL	50
1,1-Dichloroethene	< 27.8	27.8		ug/Kg dry		27.8	03/28/18 18:58	B8C1040	JL	50
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry		13.7	03/28/18 18:58	B8C1040	JL	50
1,2-Dibromo-3-chloropropane	< 39.0	39.0		ug/Kg dry		39.0	03/28/18 18:58	B8C1040	JL	50
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry		11.9	03/28/18 18:58	B8C1040	JL	50
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry		8.64	03/28/18 18:58	B8C1040	JL	50
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry		16.0	03/28/18 18:58	B8C1040	JL	50
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry		13.5	03/28/18 18:58	B8C1040	JL	50
1-Butanol	< 408	408		ug/Kg dry		408	03/28/18 18:58	B8C1040	JL	50
2-Butanone	< 101	101		ug/Kg dry		101	03/28/18 18:58	B8C1040	JL	50
2-Hexanone	< 70.0	70.0		ug/Kg dry		70.0	03/28/18 18:58	B8C1040	JL	50
4-Methyl-2-pentanone	< 47.1	47.1		ug/Kg dry		47.1	03/28/18 18:58	B8C1040	JL	50
Acetone	< 174	174		ug/Kg dry		174	03/28/18 18:58	B8C1040	JL	50
Acrylonitrile	< 50.0	50.0		ug/Kg dry		50.0	03/28/18 18:58	B8C1040	JL	50
Benzene	< 25.0	25.0		ug/Kg dry		10.2	03/28/18 18:58	B8C1040	JL	50

#### **Client Sample Results**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: SP-615

Report Date: 03/29/2018

Collection Date: 03/07/2018 11:00

Matrix: Soil

					Labi	<b>D</b> : 18C0468-01 (Co	ntinuea)		
Analyses	Result	EMT Reporting Limit Qual		Reg .imit	MDL	Date/Time Analyzed	Batch	Analyst	0
Volatile Organic Compounds l	bv GC/MS	(Continued)							
-	_	ONR: PUBL-FW-14	10 (Continued)						
Bromodichloromethane	< 25.0	25.0	ug/Kg dry		15.3	03/28/18 18:58	B8C1040	JL	50
Bromoform	< 25.0	25.0	ug/Kg dry		16.6	03/28/18 18:58	B8C1040	JL	50
Carbon disulfide	< 25.0	25.0	ug/Kg dry		12.4	03/28/18 18:58	B8C1040	JL	50
Carbon tetrachloride	< 25.0	25.0	ug/Kg dry		10.8	03/28/18 18:58	B8C1040	JL	50
Chlorobenzene	< 25.0	25.0	ug/Kg dry		11.8	03/28/18 18:58	B8C1040	JL	50
Chloroform	< 25.0	25.0	ug/Kg dry		22.1	03/28/18 18:58	B8C1040	JL	50
cis-1,2-Dichloroethene	< 25.0	25.0	ug/Kg dry		24.4	03/28/18 18:58	B8C1040	JL	50
Dibromochloromethane	< 25.0	25.0	ug/Kg dry		19.4	03/28/18 18:58	B8C1040	JL	50
Ethylbenzene	< 25.0	25.0	ug/Kg dry		15.2	03/28/18 18:58	B8C1040	JL	50
m,p-Xylene	< 75.7	75.7	ug/Kg dry		75.7	03/28/18 18:58	B8C1040	JL	50
Methyl tert-butyl ether	< 25.0	25.0	ug/Kg dry		17.8	03/28/18 18:58	B8C1040	JL	50
Methylene chloride	< 41.6	41.6	ug/Kg dry		41.6	03/28/18 18:58	B8C1040	JL	50
o-Xylene	< 25.0	25.0	ug/Kg dry		10.5	03/28/18 18:58	B8C1040	JL	50
Styrene	< 25.0	25.0	ug/Kg dry		15.2	03/28/18 18:58	B8C1040	JL	50
Tetrachloroethene	212	25.0	ug/Kg dry		18.4	03/28/18 18:58	B8C1040	JL	50
Toluene	< 25.0	25.0	ug/Kg dry		13.8	03/28/18 18:58	B8C1040	JL	50
trans-1,2-Dichloroethene	< 33.6	33.6	ug/Kg dry		33.6	03/28/18 18:58	B8C1040	JL	50
Trichloroethene	27.9	25.0	ug/Kg dry		12.3	03/28/18 18:58	B8C1040	JL	50
Vinyl acetate	< 27.3	27.3	ug/Kg dry		27.3	03/28/18 18:58	B8C1040	JL	50
Vinyl chloride	< 25.0	25.0	ug/Kg dry		16.8	03/28/18 18:58	B8C1040	JL	50
Xylenes, Total	< 86.2	86.2	ug/Kg dry		86.2	03/28/18 18:58	B8C1040	JL	50
1,2-Dichloroethene, Total	< 58.0	58.0	ug/Kg dry		58.0	03/28/18 18:58	B8C1040	JL	50
Surrogate: Dibromofluoromethane			Recovery: 101%	6 L	_imits: 78-137	03/28/18 18:58	B8C1040	JL	50
Surrogate: 1,2-Dichloroethane-d4			Recovery: 1039		_imits: 86-137	03/28/18 18:58	B8C1040	JL	50
Surrogate: Fluorobenzene			Recovery: 97%		Limits: 80-120	03/28/18 18:58	B8C1040	JL	50
Surrogate: Toluene-d8			Recovery: 92%		_imits: 85-115	03/28/18 18:58	B8C1040	JL	50
Surrogate: 4-Bromofluorobenzene			Recovery: 93%		_imits: 85-120	03/28/18 18:58	B8C1040	JL	50
Surrogate: 1,2-Dichlorobenzene-d4			Recovery: 119%		_imits: 85-128	03/28/18 18:58	B8C1040	JL	50
Semivolatile Organic Compou	ında by Cı	C/MS							
Method: SW827	_								
Cresols, Total, TCLP	< 0.0040	0.0177	mg/L	200	0.0040	03/21/18 05:38	B8C0637	JN1	2
1,4-Dichlorobenzene, TCLP	< 0.0014	0.0088	mg/L	7.5		03/21/18 05:38	B8C0637	JN1	2
2,4,5-Trichlorophenol, TCLP	< 0.0014	0.0442	mg/L	400		03/21/18 05:38	B8C0637	JN1	2
2,4,6-Trichlorophenol, TCLP	< 0.0057	0.0442	mg/L	400		03/21/18 05:38	B8C0637	JN1	2
2,4-Dinitrotoluene, TCLP	< 0.0037	0.0221	mg/L	0.13		03/21/18 05:38	B8C0637	JN1	2
2-Methylphenol, TCLP	< 0.0032	0.0088	mg/L	200		03/21/18 05:38	B8C0637	JN1	2
3 & 4-Methylphenol, TCLP	< 0.0020	0.0088	mg/L	200		03/21/18 05:38	B8C0637	JN1	2
Hexachlorobenzene, TCLP	< 0.0020	0.0088	mg/L	0.13		03/21/18 05:38	B8C0637	JN1	2
Hexachlorobutadiene, TCLP	< 0.0017	0.0442	mg/L	0.13		03/21/18 05:38	B8C0637	JN1 JN1	2
Hexachloroethane, TCLP	< 0.0056	0.0442	-	3		03/21/18 05:38	B8C0637	JN1 JN1	2
Nitrobenzene, TCLP	< 0.0036	0.0442	mg/L	2		03/21/18 05:38	B8C0637	JN1 JN1	2
Pentachlorophenol, TCLP	< 0.0026	0.221	mg/L	100		03/21/18 05:38	B8C0637	JN1 JN1	2
Pyridine, TCLP	< 0.0335	0.221	mg/L mg/L	100		03/21/18 05:38	B8C0637	JN1 JN1	2
		<b>-</b>	J <sup>.</sup> –						

## **Client Sample Results**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: SP-615

Report Date: 03/29/2018

Collection Date: 03/07/2018 11:00

Matrix: Soil

**Lab ID:** 18C0468-01 (Continued)

		EMT Reporting			Reg		Date/Time			
Analyses	Result	Limit		Units	Limit	MDL	Analyzed	Batch	Analyst	D
Semivolatile Organic Compo	ounds by GC	MS (Con	tinue	d)						
Method: SW82	270D / SW3510	) / SW1311	(Cont	inued)						
Surrogate: Phenol-d5, TCLP				Recovery: 369	%	Limits: 1-101	03/21/18 05:38	B8C0637	JN1	2
Surrogate: Nitrobenzene-d5, TCLP				Recovery: 509	%	Limits: 23-119	03/21/18 05:38	B8C0637	JN1	2
curregater rutherenzeme ae, rezi	Surrogate: 2-Fluorobiphenyl, TCLP		Recov			Limita: 20 121	imits: 28-124 03/21/18 05:38		• • • • • • • • • • • • • • • • • • • •	2
Surrogate: 2-Fluorobiphenyl, TCLP				Recovery: 449	<b>6</b>	LIIIIIIS. 20-124	03/21/10 03.30	B8C0637	3141	
•	CLP			Recovery: 449 Recovery: 409		Limits: 26-124 Limits: 11-102	03/21/18 05:38	B8C0637	JN1	2

## **Client Sample Results**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: PE-E

Report Date: 03/29/2018

Collection Date: 03/07/2018 10:45

Matrix: Soil

Analyses	Result	EMT Reporting Limit	Qual		eg mit MDL	Date/Time Analyzed	Batch	Analyst	DF
Wet Chemistry									
Method: SM2540	)G								
Total Solids	93.5	0.100		% (Percent)	0.00700	03/14/18 17:32	B8C0504	JJ2	1
PVOC Compounds by GC PID/	/FID								
Method: WI(95)-	GRO/PVOC	: PUBL-SW-	-140						
1,2,4-Trimethylbenzene	< 42.6	42.6		ug/Kg dry	42.6	03/15/18 17:21	B8C0564	FP1	50
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	21.0	03/15/18 17:21	B8C0564	FP1	50
Benzene	< 38.6	38.6		ug/Kg dry	38.6	03/15/18 17:21	B8C0564	FP1	50
Ethylbenzene	< 25.2	25.2		ug/Kg dry	25.2	03/15/18 17:21	B8C0564	FP1	50
m,p-Xylene	< 25.0	25.0		ug/Kg dry	23.1	03/15/18 17:21	B8C0564	FP1	50
Methyl tert-butyl ether	< 66.3	66.3		ug/Kg dry	66.3	03/15/18 17:21	B8C0564	FP1	50
Naphthalene	165	44.8		ug/Kg dry	44.8	03/15/18 17:21	B8C0564	FP1	50
o-Xylene	< 31.7	31.7		ug/Kg dry	31.7	03/15/18 17:21	B8C0564	FP1	50
Toluene	< 46.3	46.3		ug/Kg dry	46.3	03/15/18 17:21	B8C0564	FP1	50
Xylenes, Total	< 53.6	53.6		ug/Kg dry	53.6	03/15/18 17:21	B8C0564	FP1	50
Surrogate: 1,4-Dichlorobenzene-d4				Recovery: 101%	Limits: 70-130	03/15/18 17:21	B8C0564	FP1	50

## **Client Sample Results**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: PE-C

Report Date: 03/29/2018

Collection Date: 03/07/2018 10:50

Matrix: Soil

		EMT Reporting		ı	Reg	Date/Time			
Analyses	Result	Limit	Qual		imit MDL	Analyzed	Batch	Analyst	D
Wet Chemistry									
Method: SM2540	)G								
Total Solids	93.7	0.100		% (Percent)	0.00700	03/14/18 17:34	B8C0504	JJ2	1
PVOC Compounds by GC PID	/FID								
Method: WI(95)-	GRO/PVOC	: PUBL-SW	-140						
1,2,4-Trimethylbenzene	< 42.6	42.6		ug/Kg dry	42.6	03/15/18 17:56	B8C0564	FP1	50
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	21.0	03/15/18 17:56	B8C0564	FP1	50
Benzene	< 38.6	38.6		ug/Kg dry	38.6	03/15/18 17:56	B8C0564	FP1	50
Ethylbenzene	< 25.2	25.2		ug/Kg dry	25.2	03/15/18 17:56	B8C0564	FP1	50
m,p-Xylene	< 25.0	25.0		ug/Kg dry	23.1	03/15/18 17:56	B8C0564	FP1	50
Methyl tert-butyl ether	< 66.3	66.3		ug/Kg dry	66.3	03/15/18 17:56	B8C0564	FP1	50
Naphthalene	116	44.8		ug/Kg dry	44.8	03/15/18 17:56	B8C0564	FP1	50
o-Xylene	< 31.7	31.7		ug/Kg dry	31.7	03/15/18 17:56	B8C0564	FP1	50
Toluene	< 46.3	46.3		ug/Kg dry	46.3	03/15/18 17:56	B8C0564	FP1	50
Xylenes, Total	< 53.6	53.6		ug/Kg dry	53.6	03/15/18 17:56	B8C0564	FP1	50
Surrogate: 1,4-Dichlorobenzene-d4				Recovery: 106%	6 Limits: 70-130	03/15/18 17:56	B8C0564	FP1	50

## **Client Sample Results**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Client Sample ID: PE-W

Report Date: 03/29/2018

Collection Date: 03/07/2018 10:55

Matrix: Soil

		EMT							
Analyses	Result	Reporting Limit (	Qual Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst	DI
Wet Chemistry									
Method: SM254	10G								
Total Solids	83.9	0.100	% (Percent)		0.00700	03/14/18 17:36	B8C0504	JJ2	1
PVOC Compounds by GC PIL	D/FID								
Method: WI(95)	-GRO/PVOC	: PUBL-SW-	140						
1,2,4-Trimethylbenzene	< 42.6	42.6	ug/Kg dry		42.6	03/15/18 18:32	B8C0564	FP1	50
1,3,5-Trimethylbenzene	< 25.0	25.0	ug/Kg dry		21.0	03/15/18 18:32	B8C0564	FP1	50
Benzene	< 38.6	38.6	ug/Kg dry		38.6	03/15/18 18:32	B8C0564	FP1	50
Ethylbenzene	< 25.2	25.2	ug/Kg dry		25.2	03/15/18 18:32	B8C0564	FP1	50
m,p-Xylene	< 25.0	25.0	ug/Kg dry		23.1	03/15/18 18:32	B8C0564	FP1	50
Methyl tert-butyl ether	< 66.3	66.3	ug/Kg dry		66.3	03/15/18 18:32	B8C0564	FP1	50
Naphthalene	134	44.8	ug/Kg dry		44.8	03/15/18 18:32	B8C0564	FP1	50
o-Xylene	< 31.7	31.7	ug/Kg dry		31.7	03/15/18 18:32	B8C0564	FP1	50
Toluene	< 46.3	46.3	ug/Kg dry		46.3	03/15/18 18:32	B8C0564	FP1	50
Xylenes, Total	< 53.6	53.6	ug/Kg dry		53.6	03/15/18 18:32	B8C0564	FP1	50
Surrogate: 1,4-Dichlorobenzene-d4			Recovery	/: 94%	Limits: 70-130	03/15/18 18:32	B8C0564	FP1	50

Report Date: 03/29/2018

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#### **Dates Report**

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

					Leached				
Sample ID	Client Sample ID	Collection	Matrix	Test Name	Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18C0468-01	SP-615	03/07/18	Soil	Lead, TCLP ICP-AES	03/14/18 11:32	03/15/18 12:29	03/15/18 19:41	B8C0526	S8C0247
				Semivolatile Organic Compounds TCLP by GC/MS	03/14/18 11:32	03/20/18 08:50	03/21/18 05:38	B8C0637	S8C0327
				Volatile Organic Compounds TCLP by GC/MS	03/16/18 16:02	03/21/18 12:07	03/22/18 07:21	B8C0737	S8C0332
				Total Solids / Percent Moisture		03/27/18 16:53	03/27/18 17:10	B8C0934	
				Volatile Organic Compounds (WDNR) by GC/MS		03/28/18 11:38	03/28/18 18:58	B8C1040	S8C0485
18C0468-02	FO-BROADWAY	03/08/18		Total Solids / Percent Moisture		03/14/18 17:09	03/14/18 17:30	B8C0504	
				Volatile Organic Compounds by GC/MS		03/15/18 13:00	03/16/18 00:48	B8C0554	S8C0249
18C0468-03	PE-E	03/07/18		Total Solids / Percent Moisture		03/14/18 17:09	03/14/18 17:32	B8C0504	
				PVOC (WDNR) by GC/FID		03/15/18 09:00	03/15/18 17:21	B8C0564	S8C0253
18C0468-04	PE-C	03/07/18		Total Solids / Percent Moisture		03/14/18 17:09	03/14/18 17:34	B8C0504	
				PVOC (WDNR) by GC/FID		03/15/18 09:00	03/15/18 17:56	B8C0564	S8C0253
18C0468-05	PE-W	03/07/18		Total Solids / Percent Moisture		03/14/18 17:09	03/14/18 17:36	B8C0504	
				PVOC (WDNR) by GC/FID		03/15/18 09:00	03/15/18 18:32	B8C0564	S8C0253

## **Quality Control**

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Solid

## **Wet Chemistry**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Analyte	Nesuit	LIIIII	Offics	Level	resuit	/0INLO	LIIIIII	INFD	LIIIII	Quai	
Batch: B8C0504											
Blank (B8C0504-BLK1)				Prepared:	03/14/2018	17:09	Analyzed: 03	3/14/2018	17:42		
Total Solids	< 0.00700	0.100	%								1
LCS (B8C0504-BS1)				Prepared:	03/14/2018	17:09	Analyzed: 03	3/14/2018	17:44		
Total Solids	0.189	0.100	%	0.2000		94.6	80.2-112				1
Batch: B8C0934											
Blank (B8C0934-BLK1)				Prepared:	03/27/2018	16:53	Analyzed: 03	3/27/2018	17:24		
Total Solids	< 0.00700	0.100	%								1
LCS (B8C0934-BS1)				Prepared:	03/27/2018	16:53	Analyzed: 03	3/27/2018	17:26		
Total Solids	0.178	0.100	%	0.2000		89.1	80.2-112				1
Duplicate (B8C0934-DUP1)		Source: 180	C0815-02	Prepared:	03/27/2018	16:53	Analyzed: 03	3/27/2018	17:28		
Total Solids	99.0	0.100	%		99.0			0.0427	5		1

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Toluene

Xylenes, Total

Surrogate: 1,4-Dichlorobenzene-d4

Report Date: 03/29/2018

Matrix: Solid

80-120

80-120

70-130

113

101

20

20

20

20

## **PVOC Compounds by GC PID/FID**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8C0564		-	-								
Blank (B8C0564-BLK1)				Prepared	d: 03/15/201	8 09:00 A	Analyzed: 03	3/15/2018	10:59		
1,2,4-Trimethylbenzene	< 42.6	42.6	ug/Kg wet								50
1,3,5-Trimethylbenzene	< 25.0	25.0	ug/Kg wet								50
Benzene	< 38.6	38.6	ug/Kg wet								50
Ethylbenzene	< 25.2	25.2	ug/Kg wet								50
m,p-Xylene	< 25.0	25.0	ug/Kg wet								50
Methyl tert-butyl ether	< 66.3	66.3	ug/Kg wet								50
Naphthalene	< 44.8	44.8	ug/Kg wet								50
o-Xylene	< 31.7	31.7	ug/Kg wet								50
Toluene	< 46.3	46.3	ug/Kg wet								50
Xylenes, Total	< 53.6	53.6	ug/Kg wet								50
Surrogate: 1,4-Dichlorobenzene-d4	19.7		ug/Kg	20.00		98	70-130				50
LCS (B8C0564-BS1)				Prepared	d: 03/15/201	8 09:00 A	Analyzed: 03	3/15/2018	16:44		
1,2,4-Trimethylbenzene	4570	128	ug/Kg wet	5000		91	80-120				50
1,3,5-Trimethylbenzene	4560	63.1	ug/Kg wet	5000		91	80-120				50
Benzene	4580	116	ug/Kg wet	5000		92	80-120				50
Ethylbenzene	4610	75.6	ug/Kg wet	5000		92	80-120				50
m,p-Xylene	9290	69.2	ug/Kg wet	10000		93	80-120				50
Methyl tert-butyl ether	4770	199	ug/Kg wet	5000		95	80-120				50
Naphthalene	4610	134	ug/Kg wet	5000		92	80-120				50
o-Xylene	4650	95.0	ug/Kg wet	5000		93	80-120				50
Toluene	4610	139	ug/Kg wet	5000		92	80-120				50
Xylenes, Total	13900	161	ug/Kg wet	15000		93	80-120				50
Surrogate: 1,4-Dichlorobenzene-d4	20.2		ug/Kg	20.00		101	70-130				50
LCS Dup (B8C0564-BSD1)				Prepared	d: 03/15/201	8 09:00 A	Analyzed: 03	3/15/2018	19:08		
1,2,4-Trimethylbenzene	5570	128	ug/Kg wet	5000		111	80-120	20	20		50
1,3,5-Trimethylbenzene	5550	63.1	ug/Kg wet	5000		111	80-120	19	20		50
Benzene	5580	116	ug/Kg wet	5000		112	80-120	20	20		50
Ethylbenzene	5620	75.6	ug/Kg wet	5000		112	80-120	20	20		50
m,p-Xylene	11300	69.2	ug/Kg wet	10000		113	80-120	20	20		50
Methyl tert-butyl ether	5760	199	ug/Kg wet	5000		115	80-120	19	20		50
Naphthalene	5460	134	ug/Kg wet	5000		109	80-120	17	20		50
o-Xylene	5640	95.0	ug/Kg wet	5000		113	80-120	19	20		50
•	· · ·		5 5			-		-	-		

ug/Kg wet

ug/Kg wet

ug/Kg

5000

15000

20.00

5630

17000

20.2

50

50

50

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Solid

## **Volatile Organic Compounds by GC/MS**

	Re	porting		Spike	Source		%REC		RPD		
	sult	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

#### Batch: B8C0554 - SW5035

Blank (B8C0554-BLK1)				Prepared: 03/1	5/2018 13:00	Analyzed: 03	/15/2018	14:16	
Benzene	< 12.8	98.4	ug/Kg wet						50
Surrogate: Fluorobenzene	19.3		ug/Kg	20.00	96	91-106			50
Surrogate: Toluene-d8	17.5		ug/Kg	20.00	87	71-112			50
Surrogate: 4-Bromofluorobenzene	10.7		ug/Kg	10.00	107	85-119			50
LCS (B8C0554-BS1)				Prepared: 03/1	5/2018 13:00	Analyzed: 03.	/15/2018	15:16	
Benzene	4680	97.5	ug/Kg wet	3899	120	77-121			50
Surrogate: Fluorobenzene	20.2		ug/Kg	20.00	101	91-106			50
Surrogate: Toluene-d8	20.8		ug/Kg	20.00	104	71-112			50
Surrogate: 4-Bromofluorobenzene	9.07		ug/Kg	10.00	91	85-119			50
LCS Dup (B8C0554-BSD1)				Prepared: 03/1	5/2018 13:00	Analyzed: 03	/15/2018	15:46	
Benzene	4510	99.2	ug/Kg wet	3969	114	77-121	4	20	50
Surrogate: Fluorobenzene	20.3		ug/Kg	20.00	102	91-106			50
Surrogate: Toluene-d8	20.9		ug/Kg	20.00	104	71-112			50
Surrogate: 4-Bromofluorobenzene	9.66		ug/Kg	10.00	97	85-119			50

## Batch: B8C0737 - SW5030

Batch: B000/3/ - 34/3030								
Blank (B8C0737-BLK1)				Prepared: 03/21/2018	8 12:07	Analyzed: 03/22/20	18 05:12	
1,1-Dichloroethene	< 0.00117	0.00400	mg/L				1	
1,2-Dichloroethane	< 0.00145	0.00800	mg/L				1	
1,4-Dichlorobenzene	< 0.000860	0.00400	mg/L				1	
2-Butanone	< 0.00954	0.0400	mg/L				1	
Benzene	< 0.000940	0.00400	mg/L				1	
Carbon tetrachloride	< 0.000850	0.00400	mg/L				1	
Chlorobenzene	< 0.000610	0.00400	mg/L				1	
Chloroform	< 0.00130	0.00800	mg/L				1	
Tetrachloroethene	< 0.00102	0.00400	mg/L				1	
Trichloroethene	< 0.000900	0.00400	mg/L				1	
Vinyl chloride	< 0.00105	0.00400	mg/L				1	
Surrogate: Dibromofluoromethane	18.7		ug/L	20.00	93	78-119	1	
Surrogate: 1,2-Dichloroethane-d4	19.8		ug/L	20.00	99	71-136	1	
Surrogate: Fluorobenzene	19.4		ug/L	20.00	97	81-114	1	
Surrogate: Toluene-d8	20.0		ug/L	20.00	100	85-116	1	
Surrogate: 4-Bromofluorobenzene	10.6		ug/L	10.00	106	79-119	1	
Surrogate: 1,2-Dichlorobenzene-d4	21.6		ug/L	20.00	108	80-120	1	

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Solid

#### **Volatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

#### Batch: B8C0737 - SW5030 (Continued)

LCS (B8C0737-BS1)				Prepared: 03/21	1/2018 12:07	Analyzed: 03/22/2018 02:29	
1,1-Dichloroethene	0.0980	0.00400	mg/L	0.08000	123	71-131	1
1,2-Dichloroethane	0.0884	0.00800	mg/L	0.08000	111	73-128	1
1,4-Dichlorobenzene	0.0912	0.00400	mg/L	0.08000	114	84-129	1
2-Butanone	0.256	0.0400	mg/L	0.2800	92	71-119	1
Benzene	0.0852	0.00400	mg/L	0.08000	106	79-120	1
Carbon tetrachloride	0.0862	0.00400	mg/L	0.08000	108	75-125	1
Chlorobenzene	0.0870	0.00400	mg/L	0.08000	109	82-118	1
Chloroform	0.0939	0.00800	mg/L	0.08000	117	79-124	1
Tetrachloroethene	0.0810	0.00400	mg/L	0.08000	101	74-129	1
Trichloroethene	0.0868	0.00400	mg/L	0.08000	108	84-129	1
Vinyl chloride	0.106	0.00400	mg/L	0.08000	132	58-137	1
Surrogate: Dibromofluoromethane	17.8		ug/L	20.00	89	78-119	1
Surrogate: 1,2-Dichloroethane-d4	17.5		ug/L	20.00	88	71-136	1
Surrogate: Fluorobenzene	18.5		ug/L	20.00	92	81-114	1
Surrogate: Toluene-d8	17.4		ug/L	20.00	87	85-116	1
Surrogate: 4-Bromofluorobenzene	8.14		ug/L	10.00	81	79-119	1
Surrogate: 1,2-Dichlorobenzene-d4	17.8		ug/L	20.00	89	80-120	1

<b>.</b>			- 3							
LCS Dup (B8C0737-BSD1)				Prepared: 03/2	1/2018 12:07	Analyzed: 03	/22/2018(	03:02		
1,1-Dichloroethene	0.0719	0.00400	mg/L	0.08000	90	71-131	31	20	Р	1
1,2-Dichloroethane	0.0777	0.00800	mg/L	0.08000	97	73-128	13	20		1
1,4-Dichlorobenzene	0.0815	0.00400	mg/L	0.08000	102	84-129	11	20		1
2-Butanone	0.274	0.0400	mg/L	0.2800	98	71-119	7	20		1
Benzene	0.0832	0.00400	mg/L	0.08000	104	79-120	2	20		1
Carbon tetrachloride	0.0793	0.00400	mg/L	0.08000	99	75-125	8	20		1
Chlorobenzene	0.0868	0.00400	mg/L	0.08000	108	82-118	0.3	20		1
Chloroform	0.0915	0.00800	mg/L	0.08000	114	79-124	3	20		1
Tetrachloroethene	0.0783	0.00400	mg/L	0.08000	98	74-129	3	20		1
Trichloroethene	0.0755	0.00400	mg/L	0.08000	94	84-129	14	20		1
Vinyl chloride	0.0772	0.00400	mg/L	0.08000	97	58-137	31	20	Р	1
Surrogate: Dibromofluoromethane	23.7		ug/L	20.00	119	78-119				1
Surrogate: 1,2-Dichloroethane-d4	22.2		ug/L	20.00	111	71-136				1
Surrogate: Fluorobenzene	20.4		ug/L	20.00	102	81-114				1
Surrogate: Toluene-d8	21.5		ug/L	20.00	107	85-116				1

#### Batch: B8C1040

Surrogate: 4-Bromofluorobenzene

Surrogate: 1,2-Dichlorobenzene-d4

Blank (B8C1040-BLK1)			Prepared: 03/28/2018 11:38	Analyzed: 03/28/2018 17:52	
1,1,1-Trichloroethane	< 26.6	26.6 ug/Kg wet			50
1,1,2,2-Tetrachloroethane	< 25.7	25.7 ug/Kg wet			50

ug/L

ug/L

10.9

23.5

10.00

20.00

109

79-119

80-120

Report Date: 03/29/2018

Matrix: Solid

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#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Waste Characterization

18006/18009

Work Order: 18C0468

Project:

## **Volatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

Blank (B8C1040-BLK1) (Continued)			Prepared: 03/28/2018 11:38 Analyzed: 03/28/2018	17:52
1,1,2-Trichloroethane	< 26.4	26.4 ug/Kg v	et	50
1,1-Dichloroethane	< 40.0	40.0 ug/Kg v		50
1,1-Dichloroethene	< 31.2	31.2 ug/Kg v		50
1,2,4-Trimethylbenzene	< 25.0	25.0 ug/Kg v	et	50
1,2-Dibromo-3-chloropropane	< 43.7	43.7 ug/Kg v		50
1,2-Dibromoethane	< 25.0	25.0 ug/Kg v	et	50
1,2-Dichloroethane	< 25.0	25.0 ug/Kg v		50
1,2-Dichloropropane	< 25.0	25.0 ug/Kg v	et	50
1,3,5-Trimethylbenzene	< 25.0	25.0 ug/Kg v	et	50
1-Butanol	< 457	457 ug/Kg v	et	50
2-Butanone	< 114	114 ug/Kg v	et	50
2-Hexanone	< 78.5	78.5 ug/Kg v	et	50
4-Methyl-2-pentanone	< 52.9	52.9 ug/Kg v	et	50
Acetone	< 195	195 ug/Kg v	et	50
Acrylonitrile	< 56.1	56.1 ug/Kg v	et	50
Benzene	< 25.0	25.0 ug/Kg v	et	50
Bromodichloromethane	< 25.0	25.0 ug/Kg v	et	50
Bromoform	< 25.0	25.0 ug/Kg v	et	50
Carbon disulfide	< 25.0	25.0 ug/Kg v	et	50
Carbon tetrachloride	< 25.0	25.0 ug/Kg v	et	50
Chlorobenzene	< 25.0	25.0 ug/Kg v	et	50
Chloroform	< 25.0	25.0 ug/Kg v	et	50
cis-1,2-Dichloroethene	< 27.4	27.4 ug/Kg v	et	50
Dibromochloromethane	< 25.0	25.0 ug/Kg v	et	50
Ethylbenzene	< 25.0	25.0 ug/Kg v	et	50
m,p-Xylene	< 84.9	84.9 ug/Kg v	et	50
Methyl tert-butyl ether	< 25.0	25.0 ug/Kg v	et	50
Methylene chloride	< 46.7	46.7 ug/Kg v	et	50
o-Xylene	< 25.0	25.0 ug/Kg v	et	50
Styrene	< 25.0	25.0 ug/Kg v	et	50
Tetrachloroethene	< 25.0	25.0 ug/Kg v	et	50
Toluene	< 25.0	25.0 ug/Kg v	et	50
trans-1,2-Dichloroethene	< 37.7	37.7 ug/Kg v	et	50
Trichloroethene	< 25.0	25.0 ug/Kg v	et	50
Vinyl acetate	< 30.6	30.6 ug/Kg v	et	50
Vinyl chloride	< 25.0	25.0 ug/Kg v	et	50
Xylenes, Total	< 96.7	96.7 ug/Kg v	et	50
1,2-Dichloroethene, Total	< 65.1	65.1 ug/Kg v	et	50
Surrogate: Dibromofluoromethane	20.9	ug/Ko	20.00 105 78-137	50
Surrogate: 1,2-Dichloroethane-d4	18.8	ug/Kg	20.00 94 86-137	50
Surrogate: Fluorobenzene	19.8	ug/Kg	20.00 99 80-120	50
Surrogate: Toluene-d8	19.3	ug/Kg	20.00 97 85-115	50

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Solid

## **Volatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

Blank (B8C1040-BLK1) (Continued)				Prepared: 03/	/28/2018 11:38	Analyzed: 03/28/2018	17:52
Surrogate: 4-Bromofluorobenzene	8.91		ug/Kg	10.00	89	85-120	50
Surrogate: 1,2-Dichlorobenzene-d4	22.6		ug/Kg	20.00	113	85-128	50
LCS (B8C1040-BS1)				Prepared: 03/	/28/2018 11:38 <i>/</i>	Analyzed: 03/28/2018	15:38
1,1,1-Trichloroethane	3890	26.6	ug/Kg wet	4000	97	55-145	50
1,1,2,2-Tetrachloroethane	3920	25.7	ug/Kg wet	4000	98	40-145	50
1,1,2-Trichloroethane	4180	26.4	ug/Kg wet	4000	105	50-140	50
1,1-Dichloroethane	3800	40.0	ug/Kg wet	4000	95	65-135	50
1,1-Dichloroethene	3320	31.2	ug/Kg wet	4000	83	55-150	50
1,2,4-Trimethylbenzene	4110	25.0	ug/Kg wet	4000	103	55-145	50
1,2-Dibromo-3-chloropropane	3760	43.7	ug/Kg wet	4000	94	25-150	50
1,2-Dibromoethane	4640	25.0	ug/Kg wet	4000	116	60-135	50
1,2-Dichloroethane	3640	25.0	ug/Kg wet	4000	91	60-145	50
1,2-Dichloropropane	3910	25.0	ug/Kg wet	4000	98	65-125	50
1,3,5-Trimethylbenzene	4210	25.0	ug/Kg wet	4000	105	55-145	50
1-Butanol	26200	457	ug/Kg wet	36000	73	70-130	50
2-Butanone	10900	114	ug/Kg wet	14000	78	10-180	50
2-Hexanone	11600	78.5	ug/Kg wet	14000	83	30-160	50
4-Methyl-2-pentanone	11200	52.9	ug/Kg wet	14000	80	30-165	50
Acetone	10900	195	ug/Kg wet	14000	78	10-180	50
Acrylonitrile	3390	56.1	ug/Kg wet	4000	85	70-130	50
Benzene	4180	25.0	ug/Kg wet	4000	104	65-135	50
Bromodichloromethane	4050	25.0	ug/Kg wet	4000	101	60-135	50
Bromoform	4400	25.0	ug/Kg wet	4000	110	45-150	50
Carbon disulfide	3850	25.0	ug/Kg wet	4000	96	30-180	50
Carbon tetrachloride	4190	25.0	ug/Kg wet	4000	105	55-145	50
Chlorobenzene	4430	25.0	ug/Kg wet	4000	111	65-130	50
Chloroform	3920	25.0	ug/Kg wet	4000	98	65-135	50
cis-1,2-Dichloroethene	4190	27.4	ug/Kg wet	4000	105	55-135	50
Dibromochloromethane	4590	25.0	ug/Kg wet	4000	115	55-140	50
Ethylbenzene	4640	25.0	ug/Kg wet	4000	116	65-135	50
m,p-Xylene	9820	84.9	ug/Kg wet	8000	123	70-135	50
Methyl tert-butyl ether	3530	25.0	ug/Kg wet	4000	88	70-130	50
Methylene chloride	3560	46.7	ug/Kg wet	4000	89	40-155	50
o-Xylene	3880	25.0	ug/Kg wet	4000	97	70-135	50
Styrene	4280	25.0	ug/Kg wet	4000	107	65-135	50
Tetrachloroethene	4400	25.0	ug/Kg wet	4000	110	55-150	50
Toluene	4620	25.0	ug/Kg wet	4000	115	60-135	50
trans-1,2-Dichloroethene	3590	37.7	ug/Kg wet	4000	90	55-145	50
Trichloroethene	4380	25.0	ug/Kg wet	4000	110	70-130	50
Vinyl acetate	3370	30.6	ug/Kg wet	4000	84	50-150	50
Vinyl chloride	3560	25.0	ug/Kg wet	4000	89	45-140	50

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Solid

## **Volatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

LCS (B8C1040-BS1) (Continued)				Prepared: (	03/28/2018 11:38	Analyzed: 03	/28/2018	15:38		
Xylenes, Total	13700	96.7	ug/Kg wet	12000	114	70-135				50
1,2-Dichloroethene, Total	7780	65.1	ug/Kg wet	8000	97	55-135				50
Surrogate: Dibromofluoromethane	19.9		ug/Kg	20.00	99	78-137				50
Surrogate: 1,2-Dichloroethane-d4	17.4		ug/Kg	20.00	87	86-137				50
Surrogate: Fluorobenzene	19.9		ug/Kg	20.00	100	80-120				50
Surrogate: Toluene-d8	21.0		ug/Kg	20.00	105	85-115				50
Surrogate: 4-Bromofluorobenzene	8.46		ug/Kg	10.00	85	85-120				50
Surrogate: 1,2-Dichlorobenzene-d4	19.0		ug/Kg	20.00	95	85-128				50
LCS Dup (B8C1040-BSD1)				Prepared: (	03/28/2018 11:38	Analyzed: 03	/28/2018	16:12		
1,1,1-Trichloroethane	3640	26.6	ug/Kg wet	4000	91	55-145	7	20		50
1,1,2,2-Tetrachloroethane	3990	25.7	ug/Kg wet	4000	100	40-145	2	20		50
1,1,2-Trichloroethane	3990	26.4	ug/Kg wet	4000	100	50-140	5	20		50
1,1-Dichloroethane	3650	40.0	ug/Kg wet	4000	91	65-135	4	20		50
1,1-Dichloroethene	3160	31.2	ug/Kg wet	4000	79	55-150	5	20		50
1,2,4-Trimethylbenzene	4210	25.0	ug/Kg wet	4000	105	55-145	3	20		50
1,2-Dibromo-3-chloropropane	3670	43.7	ug/Kg wet	4000	92	25-150	3	20		50
1,2-Dibromoethane	4380	25.0	ug/Kg wet	4000	110	60-135	6	20		50
1,2-Dichloroethane	3580	25.0	ug/Kg wet	4000	90	60-145	1	20		50
1,2-Dichloropropane	3700	25.0	ug/Kg wet	4000	93	65-125	6	20		50
1,3,5-Trimethylbenzene	4330	25.0	ug/Kg wet	4000	108	55-145	3	20		50
1-Butanol	28800	457	ug/Kg wet	36000	80	70-130	10	20		50
2-Butanone	14300	114	ug/Kg wet	14000	102	10-180	27	20	Р	50
2-Hexanone	10700	78.5	ug/Kg wet	14000	77	30-160	7	20		50
4-Methyl-2-pentanone	10600	52.9	ug/Kg wet	14000	76	30-165	6	20		50
Acetone	10700	195	ug/Kg wet	14000	76	10-180	2	20		50
Acrylonitrile	3180	56.1	ug/Kg wet	4000	79	70-130	6	20		50
Benzene	4020	25.0	ug/Kg wet	4000	101	65-135	4	20		50
Bromodichloromethane	4000	25.0	ug/Kg wet	4000	100	60-135	1	20		50
Bromoform	4190	25.0	ug/Kg wet	4000	105	45-150	5	20		50
Carbon disulfide	3640	25.0	ug/Kg wet	4000	91	30-180	6	20		50
Carbon tetrachloride	3990	25.0	ug/Kg wet	4000	100	55-145	5	20		50
Chlorobenzene	4350	25.0	ug/Kg wet	4000	109	65-130	2	20		50
Chloroform	3700	25.0	ug/Kg wet	4000	93	65-135	6	20		50
cis-1,2-Dichloroethene	4030	27.4	ug/Kg wet	4000	101	55-135	4	20		50
Dibromochloromethane	4480	25.0	ug/Kg wet	4000	112	55-140	2	20		50
Ethylbenzene	4650	25.0	ug/Kg wet	4000	116	65-135	0.2	20		50
m,p-Xylene	9450	84.9	ug/Kg wet	8000	118	70-135	4	20		50
Methyl tert-butyl ether	3390	25.0	ug/Kg wet	4000	85	70-130	4	20		50
Methylene chloride	3450	46.7	ug/Kg wet	4000	86	40-155	3	20		50
o-Xylene	4070	25.0	ug/Kg wet	4000	102	70-135	5	20		50
Styrene	4240	25.0	ug/Kg wet	4000	106	65-135	8.0	20		50

Report Date: 03/29/2018

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## **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Waste Characterization Matrix: Solid

18006/18009

Work Order: 18C0468

Project:

## **Volatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

LCS Dup (B8C1040-BSD1) (Continued)				Prepared: 03/2	8/2018 11:38	Analyzed: 03/	28/2018	16:12	
Tetrachloroethene	4230	25.0	ug/Kg wet	4000	106	55-150	4	20	50
Toluene	4550	25.0	ug/Kg wet	4000	114	60-135	2	20	50
trans-1,2-Dichloroethene	3430	37.7	ug/Kg wet	4000	86	55-145	4	20	50
Trichloroethene	4220	25.0	ug/Kg wet	4000	105	70-130	4	20	50
Vinyl acetate	3280	30.6	ug/Kg wet	4000	82	50-150	3	20	50
Vinyl chloride	3350	25.0	ug/Kg wet	4000	84	45-140	6	20	50
Xylenes, Total	13500	96.7	ug/Kg wet	12000	113	70-135	1	20	50
1,2-Dichloroethene, Total	7460	65.1	ug/Kg wet	8000	93	55-135	4	20	50
Surrogate: Dibromofluoromethane	19.0		ug/Kg	20.00	95	78-137			50
Surrogate: 1,2-Dichloroethane-d4	17.5		ug/Kg	20.00	88	86-137			50
Surrogate: Fluorobenzene	19.5		ug/Kg	20.00	97	80-120			50
Surrogate: Toluene-d8	21.3		ug/Kg	20.00	107	85-115			50
Surrogate: 4-Bromofluorobenzene	9.02		ug/Kg	10.00	90	85-120			50
Surrogate: 1,2-Dichlorobenzene-d4	19.3		ug/Kg	20.00	96	85-128			50

## **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Water

## **Metals by ICP-AES**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8C0526 - SW3015											
Blank (B8C0526-BLK1)				Prepared	d: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	18:59		
Lead	< 0.0140	0.0500	mg/L								1
TCLP Blank (B8C0526-BLK2)				Prepared	d: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:12		
Lead	< 0.0140	0.0500	mg/L								1
LCS (B8C0526-BS1)				Prepared	d: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:03		
Lead	1.24	0.0500	mg/L	1.250		98.9	86-113				1
Serial Dilution (B8C0526-DUP1)		Source: 180	C0466-01	Prepared	d: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	20:02		
Lead	< 0.0700	0.250	mg/L		ND				10		5
MRL Check (B8C0526-MRL1)				Prepared	l: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:08		
Lead	0.0682	0.0500	mg/L	0.06250		109	70-130				1
Matrix Spike (B8C0526-MS1)		Source: 180	C0466-01	Prepared	l: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:50		
Lead	1.16	0.0500	mg/L	1.250	0.0186	91.6	75-125				1
Matrix Spike Dup (B8C0526-MSD1)		Source: 180	C0466-01	Prepared	1: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:54		
Lead	1.18	0.0500	mg/L	1.250	0.0186	92.5	75-125	0.940	20		1
Post Spike (B8C0526-PS1)		Source: 180	C0466-01	Prepared	d: 03/15/2018	3 12:29	Analyzed: 03	3/15/2018	19:58		
Lead	0.662	0.0556	mg/L	0.6944	0.0186	92.7	80-120				1

## **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

#### ,

Report Date: 03/29/2018

Matrix: Water

# Semivolatile Organic Compounds by GC/MS

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

#### Batch: B8C0637 - SW3510

Blank (B8C0637-BLK1)				Prepared: 03/20	0/2018 08:50	Analyzed: 03/21/2018 00.	:55	
Cresols, Total	< 0.0021	0.0092	mg/L					1
1,4-Dichlorobenzene	< 0.0007	0.0046	mg/L					1
2,4,5-Trichlorophenol	< 0.0027	0.0231	mg/L					1
2,4,6-Trichlorophenol	< 0.0030	0.0231	mg/L					1
2,4-Dinitrotoluene	< 0.0017	0.0116	mg/L					1
2-Methylphenol	< 0.0011	0.0046	mg/L					1
3 & 4-Methylphenol	< 0.0010	0.0046	mg/L					1
Hexachlorobenzene	< 0.0009	0.0046	mg/L					1
Hexachlorobutadiene	< 0.0028	0.0231	mg/L					1
Hexachloroethane	< 0.0029	0.0231	mg/L					1
Nitrobenzene	< 0.0014	0.0092	mg/L					1
Pentachlorophenol	< 0.0176	0.116	mg/L					1
Pyridine	< 0.0084	0.0578	mg/L					1
Surrogate: 2-Fluorophenol	0.0291		mg/L	0.09634	30	4-108		1
Surrogate: Phenol-d5	0.0236		mg/L	0.09634	24	1-101		1
Surrogate: Nitrobenzene-d5	0.0330		mg/L	0.09634	34	23-119		1
Surrogate: 2-Fluorobiphenyl	0.0326		mg/L	0.09634	34	28-124		1
Surrogate: 2,4,6-Tribromophenol	0.0179		mg/L	0.09634	19	11-102		1
Surrogate: 4-Terphenyl-d14	0.0981		mg/L	0.09634	102	79-147		1
LCS (B8C0637-BS1)				Prepared: 03/20	0/2018 08:50	Analyzed: 03/21/2018 02.	:57	
LCS (B8C0637-BS1) Cresols, Total	0.0361	0.0040	mg/L	Prepared: 03/20	0/2018 08:50 36	Analyzed: 03/21/2018 02. 8-74	:57	1
	0.0361 0.0139	0.0040 0.0020	mg/L mg/L				:57	1 1
Cresols, Total			-	0.1000	36	8-74	:57	•
Cresols, Total 1,4-Dichlorobenzene	0.0139	0.0020	mg/L	0.1000 0.05000	36 28	8-74 23-137	:57	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol	0.0139 0.0263	0.0020 0.0100	mg/L mg/L	0.1000 0.05000 0.05000	36 28 53	8-74 23-137 33-161	:57	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	0.0139 0.0263 0.0212	0.0020 0.0100 0.0100	mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000	36 28 53 42	8-74 23-137 33-161 36-149	:57	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene	0.0139 0.0263 0.0212 0.0353	0.0020 0.0100 0.0100 0.0050	mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71	8-74 23-137 33-161 36-149 31-151	:57	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol	0.0139 0.0263 0.0212 0.0353 0.0187	0.0020 0.0100 0.0100 0.0050 0.0020	mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37	8-74 23-137 33-161 36-149 31-151 36-131	:57	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35	8-74 23-137 33-161 36-149 31-151 36-131 30-137	:57 S	•
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139		1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128	S	1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4-6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene Hexachloroethane	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126	S	1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene Hexachloroethane Nitrobenzene	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143	SS	1 1 1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene Hexachloroethane Nitrobenzene Pentachlorophenol Pyridine  Surrogate: 2-Fluorophenol	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040 0.0500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37 64	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143 37-112	S	1 1 1 1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene Hexachloroethane Nitrobenzene Pentachlorophenol Pyridine	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185 0.0322 0.0105	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040 0.0500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37 64 21	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143 37-112 16-133	S	1 1 1 1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobenzene Hexachlorobethane Nitrobenzene Pentachlorophenol Pyridine  Surrogate: 2-Fluorophenol Surrogate: Phenol-d5 Surrogate: Nitrobenzene-d5	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185 0.0322 0.0105 0.00977 0.00713 0.0126	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040 0.0500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37 64 21	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143 37-112 16-133	S	1 1 1 1 1 1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobutadiene Hexachloroethane Nitrobenzene Pentachlorophenol Pyridine  Surrogate: 2-Fluorophenol Surrogate: Nitrobenzene-d5 Surrogate: 2-Fluorobiphenyl	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185 0.0322 0.0105 0.00977 0.00713 0.0126 0.0132	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040 0.0500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37 64 21	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143 37-112 16-133 4-108 1-101 23-119 28-124	S	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Cresols, Total 1,4-Dichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3 & 4-Methylphenol Hexachlorobenzene Hexachlorobenzene Hexachlorobethane Nitrobenzene Pentachlorophenol Pyridine  Surrogate: 2-Fluorophenol Surrogate: Phenol-d5 Surrogate: Nitrobenzene-d5	0.0139 0.0263 0.0212 0.0353 0.0187 0.0174 0.0336 0.0150 0.0128 0.0185 0.0322 0.0105 0.00977 0.00713 0.0126	0.0020 0.0100 0.0100 0.0050 0.0020 0.0020 0.0020 0.0100 0.0100 0.0040 0.0500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	0.1000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000 0.05000	36 28 53 42 71 37 35 67 30 26 37 64 21	8-74 23-137 33-161 36-149 31-151 36-131 30-137 39-139 36-128 33-126 30-143 37-112 16-133	S	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

#### **Quality Control**

(Continued)

Client: United Engineering Consultants, Inc.

Project: Waste Characterization

18006/18009

Work Order: 18C0468

Report Date: 03/29/2018

Matrix: Water

## **Semivolatile Organic Compounds by GC/MS**

(Continued)

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	DF

#### Batch: B8C0637 - SW3510 (Continued)

LCS Dup (B8C0637-BSD1)				Prepared: 03/2	0/2018 08:50	Analyzed: 03	/21/2018	03:37		
Cresols, Total	0.0420	0.0040	mg/L	0.1000	42	8-74	15	20		1
1,4-Dichlorobenzene	0.0182	0.0020	mg/L	0.05000	36	23-137	26	20	Р	1
2,4,5-Trichlorophenol	0.0307	0.0100	mg/L	0.05000	61	33-161	15	20		1
2,4,6-Trichlorophenol	0.0268	0.0100	mg/L	0.05000	54	36-149	23	20	Р	1
2,4-Dinitrotoluene	0.0402	0.0050	mg/L	0.05000	80	31-151	13	20		1
2-Methylphenol	0.0221	0.0020	mg/L	0.05000	44	36-131	17	20		1
3 & 4-Methylphenol	0.0199	0.0020	mg/L	0.05000	40	30-137	13	20		1
Hexachlorobenzene	0.0386	0.0020	mg/L	0.05000	77	39-139	14	20		1
Hexachlorobutadiene	0.0182	0.0100	mg/L	0.05000	36	36-128	19	20		1
Hexachloroethane	0.0167	0.0100	mg/L	0.05000	33	33-126	27	20	Р	1
Nitrobenzene	0.0246	0.0040	mg/L	0.05000	49	30-143	28	20	Р	1
Pentachlorophenol	0.0359	0.0500	mg/L	0.05000	72	37-112	11	20	J	1
Pyridine	0.0140	0.0250	mg/L	0.05000	28	16-133	29	20	P, J	1
Surrogate: 2-Fluorophenol	0.0114		mg/L	0.03334	34	4-108				1
Surrogate: Phenol-d5	0.00788		mg/L	0.03334	24	1-101				1
Surrogate: Nitrobenzene-d5	0.0164		mg/L	0.03334	49	23-119				1
Surrogate: 2-Fluorobiphenyl	0.0172		mg/L	0.03334	52	28-124				1
Surrogate: 2,4,6-Tribromophenol	0.0270		mg/L	0.03334	81	11-102				1
Surrogate: 4-Terphenyl-d14	0.0370		mg/L	0.03334	111	79-147				1

## **Certified Analyses included in this Report**

Analyte	CAS#	Certifications
SM2540G in Solid		
Total Solids	Moist	WDNR
SW6010C in Water		
Lead, TCLP	7439-92-1	AKDEC,ISO,WDNR,DoD,ILEPA
	7 100 02 1	711020,100,1001111,000,122171
SW8260B in Solid		
1,1-Dichloroethene, TCLP	75-35-4	AKDEC,LELAP,WDNR,DoD,ILEPA
1,2-Dichloroethane, TCLP	107-06-2	AKDEC,LELAP,WDNR,DoD,ILEPA
1,4-Dichlorobenzene, TCLP	106-46-7	LELAP,WDNR,DoD,ILEPA
2-Butanone, TCLP	78-93-3	LELAP,WDNR,DoD,ILEPA
Benzene, TCLP	71-43-2	LELAP,WDNR,DoD,ILEPA
Carbon tetrachloride, TCLP	56-23-5	AKDEC,LELAP,WDNR,DoD,ILEPA
Chlorobenzene, TCLP	108-90-7	AKDEC,LELAP,WDNR,DoD,ILEPA
Chloroform, TCLP	67-66-3	AKDEC,LELAP,WDNR,DoD,ILEPA
Tetrachloroethene, TCLP	127-18-4	LELAP,WDNR,DoD,ILEPA
Trichloroethene, TCLP	79-01-6	AKDEC, LELAP, WDNR, DoD, ILEPA
Vinyl chloride, TCLP	75-01-4	AKDEC,LELAP,WDNR,DoD,ILEPA
Benzene	71-43-2	LELAP,WDNR,DoD,ILEPA
SW8270D in Water		
Cresols, Total, TCLP	1319-77-3	DoD,WDNR
1,4-Dichlorobenzene, TCLP	106-46-7	DoD,WDNR,ILEPA
2,4,5-Trichlorophenol, TCLP	95-95-4	DoD,WDNR,ILEPA
2,4,6-Trichlorophenol, TCLP	88-06-2	DoD,WDNR,ILEPA
2,4-Dinitrotoluene, TCLP	121-14-2	DoD,WDNR,ILEPA
2-Methylphenol, TCLP	95-48-7	DoD,WDNR,ILEPA
3 & 4-Methylphenol, TCLP	84989-04-8	DoD,WDNR,ILEPA
Hexachlorobenzene, TCLP	118-74-1	DoD,WDNR,ILEPA
Hexachlorobutadiene, TCLP	87-68-3	DoD,WDNR,ILEPA
Hexachloroethane, TCLP	67-72-1	DoD,WDNR,ILEPA
Nitrobenzene, TCLP	98-95-3	DoD,WDNR,ILEPA
Pentachlorophenol, TCLP	87-86-5	DoD,WDNR,ILEPA
Pyridine, TCLP	110-86-1	DoD,WDNR,ILEPA
SW-846 8260B/WDNR: PUBL-FW-140 in Solid		
1,1,1-Trichloroethane	71-55-6	WDNR
1,1,2,2-Tetrachloroethane	79-34-5	WDNR
1,1,2-Trichloroethane	79-00-5	WDNR
1,1-Dichloroethane	75-34-3	WDNR
1,1-Dichloroethene	75-35-4	WDNR
1,2,4-Trimethylbenzene	95-63-6	WDNR
1,2-Dibromo-3-chloropropane	96-12-8	WDNR
1,2-Dibromoethane	106-93-4	WDNR
1,2-Dichloroethane	107-06-2	WDNR
1,2-Dichloropropane	78-87-5	WDNR

## **Certified Analyses included in this Report** (Continued)

SW-846 8260B/WDNR: PUBL-FW-140 in Solid (Continued)           1,3,5-Trimethylbenzene         108-67-8         WDNR           1-Butanol         71-36-3         WDNR           2-Butanone         78-93-3         WDNR           2-Hexanone         591-78-6         WDNR           4-Methyl-2-pentanone         108-10-1         WDNR           Acetone         67-64-1         WDNR           Acrylonitrile         107-13-1         WDNR           Benzene         71-43-2         WDNR           Bromodichloromethane         75-27-4         WDNR           Bromoform         75-25-2         WDNR           Carbon disulfide         75-15-0         WDNR           Carbon tetrachloride         56-23-5         WDNR           Chlorobenzene         108-90-7         WDNR           Chloroform         67-66-3         WDNR           Cis-1,2-Dichloroethene         156-59-2         WDNR           Dibromochloromethane         124-48-1         WDNR	Analyte	CAS#	Certifications	
1-Butanol       71-36-3       WDNR         2-Butanone       78-93-3       WDNR         2-Hexanone       591-78-6       WDNR         4-Methyl-2-pentanone       108-10-1       WDNR         Acetone       67-64-1       WDNR         Acrylonitrile       107-13-1       WDNR         Benzene       71-43-2       WDNR         Bromodichloromethane       75-27-4       WDNR         Bromoform       75-25-2       WDNR         Carbon disulfide       75-15-0       WDNR         Carbon tetrachloride       56-23-5       WDNR         Chlorobenzene       108-90-7       WDNR         Chloroform       67-66-3       WDNR         cis-1,2-Dichloroethene       156-59-2       WDNR	SW-846 8260B/WDNR: PUBL-FW-140 in Solid	d (Continued)		
2-Butanone       78-93-3       WDNR         2-Hexanone       591-78-6       WDNR         4-Methyl-2-pentanone       108-10-1       WDNR         Acetone       67-64-1       WDNR         Acrylonitrile       107-13-1       WDNR         Benzene       71-43-2       WDNR         Bromodichloromethane       75-27-4       WDNR         Bromoform       75-25-2       WDNR         Carbon disulfide       75-15-0       WDNR         Carbon tetrachloride       56-23-5       WDNR         Chlorobenzene       108-90-7       WDNR         Chloroform       67-66-3       WDNR         cis-1,2-Dichloroethene       156-59-2       WDNR	1,3,5-Trimethylbenzene	108-67-8	WDNR	
2-Hexanone       591-78-6       WDNR         4-Methyl-2-pentanone       108-10-1       WDNR         Acetone       67-64-1       WDNR         Acrylonitrile       107-13-1       WDNR         Benzene       71-43-2       WDNR         Bromodichloromethane       75-27-4       WDNR         Bromoform       75-25-2       WDNR         Carbon disulfide       75-15-0       WDNR         Carbon tetrachloride       56-23-5       WDNR         Chlorobenzene       108-90-7       WDNR         Chloroform       67-66-3       WDNR         cis-1,2-Dichloroethene       156-59-2       WDNR	1-Butanol	71-36-3	WDNR	
4-Methyl-2-pentanone       108-10-1       WDNR         Acetone       67-64-1       WDNR         Acrylonitrile       107-13-1       WDNR         Benzene       71-43-2       WDNR         Bromodichloromethane       75-27-4       WDNR         Bromoform       75-25-2       WDNR         Carbon disulfide       75-15-0       WDNR         Carbon tetrachloride       56-23-5       WDNR         Chlorobenzene       108-90-7       WDNR         Chloroform       67-66-3       WDNR         cis-1,2-Dichloroethene       156-59-2       WDNR	2-Butanone	78-93-3	WDNR	
Acetone 67-64-1 WDNR Acrylonitrile 107-13-1 WDNR Benzene 71-43-2 WDNR Bromodichloromethane 75-27-4 WDNR Bromoform 75-25-2 WDNR Carbon disulfide 75-15-0 WDNR Carbon tetrachloride 56-23-5 WDNR Chlorobenzene 108-90-7 WDNR Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	2-Hexanone	591-78-6	WDNR	
Acrylonitrile 107-13-1 WDNR Benzene 71-43-2 WDNR Bromodichloromethane 75-27-4 WDNR Bromoform 75-25-2 WDNR Carbon disulfide 75-15-0 WDNR Carbon tetrachloride 56-23-5 WDNR Chlorobenzene 108-90-7 WDNR Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	4-Methyl-2-pentanone	108-10-1	WDNR	
Benzene 71-43-2 WDNR Bromodichloromethane 75-27-4 WDNR Bromoform 75-25-2 WDNR Carbon disulfide 75-15-0 WDNR Carbon tetrachloride 56-23-5 WDNR Chlorobenzene 108-90-7 WDNR Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	Acetone	67-64-1	WDNR	
Bromodichloromethane 75-27-4 WDNR Bromoform 75-25-2 WDNR Carbon disulfide 75-15-0 WDNR Carbon tetrachloride 56-23-5 WDNR Chlorobenzene 108-90-7 WDNR Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	Acrylonitrile	107-13-1	WDNR	
Bromoform 75-25-2 WDNR Carbon disulfide 75-15-0 WDNR Carbon tetrachloride 56-23-5 WDNR Chlorobenzene 108-90-7 WDNR Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	Benzene	71-43-2	WDNR	
Carbon disulfide75-15-0WDNRCarbon tetrachloride56-23-5WDNRChlorobenzene108-90-7WDNRChloroform67-66-3WDNRcis-1,2-Dichloroethene156-59-2WDNR	Bromodichloromethane	75-27-4	WDNR	
Carbon tetrachloride56-23-5WDNRChlorobenzene108-90-7WDNRChloroform67-66-3WDNRcis-1,2-Dichloroethene156-59-2WDNR	Bromoform	75-25-2	WDNR	
Chlorobenzene108-90-7WDNRChloroform67-66-3WDNRcis-1,2-Dichloroethene156-59-2WDNR	Carbon disulfide	75-15-0	WDNR	
Chloroform 67-66-3 WDNR cis-1,2-Dichloroethene 156-59-2 WDNR	Carbon tetrachloride	56-23-5	WDNR	
cis-1,2-Dichloroethene 156-59-2 WDNR	Chlorobenzene	108-90-7	WDNR	
	Chloroform	67-66-3	WDNR	
Dibromochloromethane 124-48-1 WDNR	cis-1,2-Dichloroethene	156-59-2	WDNR	
12.101	Dibromochloromethane	124-48-1	WDNR	
Ethylbenzene 100-41-4 WDNR	Ethylbenzene	100-41-4	WDNR	
m,p-Xylene 179601-23-1 WDNR	m,p-Xylene	179601-23-1	WDNR	
Methyl tert-butyl ether 1634-04-4 WDNR	Methyl tert-butyl ether	1634-04-4	WDNR	
Methylene chloride 75-09-2 WDNR	Methylene chloride	75-09-2	WDNR	
o-Xylene 95-47-6 WDNR	o-Xylene	95-47-6	WDNR	
Styrene 100-42-5 WDNR	Styrene	100-42-5	WDNR	
Tetrachloroethene 127-18-4 WDNR	Tetrachloroethene	127-18-4	WDNR	
Toluene 108-88-3 WDNR	Toluene	108-88-3	WDNR	
trans-1,2-Dichloroethene 156-60-5 WDNR	trans-1,2-Dichloroethene	156-60-5	WDNR	
Trichloroethene 79-01-6 WDNR	Trichloroethene	79-01-6	WDNR	
Vinyl acetate 108-05-4 WDNR	Vinyl acetate	108-05-4	WDNR	
Vinyl chloride 75-01-4 WDNR	Vinyl chloride	75-01-4	WDNR	
Xylenes, Total 1330-20-7 WDNR	Xylenes, Total	1330-20-7	WDNR	
1,2-Dichloroethene, Total 540-59-0 WDNR	1,2-Dichloroethene, Total	540-59-0	WDNR	
WI(95)-GRO/PVOC: PUBL-SW-140 in Solid	WI(95)-GRO/PVOC: PUBL-SW-140 in Solid			
1,2,4-Trimethylbenzene 95-63-6 WDNR	1,2,4-Trimethylbenzene	95-63-6	WDNR	
1,3,5-Trimethylbenzene 108-67-8 WDNR	1,3,5-Trimethylbenzene	108-67-8	WDNR	
Benzene 71-43-2 WDNR	Benzene	71-43-2	WDNR	
Ethylbenzene 100-41-4 WDNR	Ethylbenzene	100-41-4	WDNR	
m,p-Xylene 179601-23-1 WDNR	m,p-Xylene	179601-23-1	WDNR	
Methyl tert-butyl ether 1634-04-4 WDNR	Methyl tert-butyl ether	1634-04-4	WDNR	
Naphthalene 91-20-3 WDNR		91-20-3	WDNR	
o-Xylene 95-47-6 WDNR	o-Xylene	95-47-6	WDNR	
Toluene 108-88-3 WDNR	Toluene	108-88-3	WDNR	
Xylenes, Total 1330-20-7 WDNR	Vylanas Total	1220 20 7	WOND	

## **List of Certifications**

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	04/30/2018
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2018
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2018
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	08/08/2018
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2018
LELAP	State of Louisiana, NELAP Accredited Lab No. 171344	05015	06/30/2018
NJDEP	State of New Jersey, NELAP Accredited Lab No. IL010	NLC160001	06/30/2018
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2018

#### **Qualifiers and Definitions**

Item	Description
Н	Sample prepared and/ or analyzed past recommended holdtime.
J	Estimated Value
Р	The %RPD result is above the laboratory control limits.
S	The recovery is outside of the laboratory control limits.
%Rec	Percent Recovery
MDL	In the state of Wisconsin MDL is equivalent to LOD; in all other applications MDL is equivalent to MDL.
	In the state of Wisconsin LOQ is equivalent to Reporting Limit.



# **ENVIRONMENTAL** ONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue Morton Grove, Illinois 60053-3203



PM: Katherine Langfoss United Engineering Consultants, Inc. **UEC** Analysis

# ustody Record

TURNAROUND TIME:
□ RUSH
day turnaround
ROUTINE

COC #: 157954 Due Date:

	Company: WITED EN Address: 16237	W. F	EXER	SON	NC.	1. Wast 2. Drink	Sample Type:  1. Waste Water 4. Sludge 7. Groundwater (filtered) 2. Drinking Water 5. Oil 8. Other							Analyses				
	NEW BE		•					P - Plas	3. Soil 6. Groundwater  Container Type: P - Plastic V - VOC Vial O - Other G - Glass B - Tedlar Bag								///// <sub>EMT</sub>	
		Phone #: (262) 795 - 1447 Fax #: (262) 706 - 4400 P.O. #: Proj. #:									9	-	/					
	Client Contact:		Present 1. None	<b>vative:</b> e 4. N	NaOH 7.	Zn Ace		/8	9/J/				/ / / ONL					
	Project ID / Location:		2. H <sub>2</sub> SC 3. HNO		HCI 8. MeOH	Other		14	2		(2) (S)	1 / /	/ / / EMT					
	2 1 15	ər		S	ampling		Preservation				73	Z à	40		/ / WORKORDE			
	Sample I.D.	Sample Type	Size	Туре	No.	Ву	Date	Time	Hq	Temp.	Field	Lab	71919	17/	20	(D)	/ / /	///# <u>1800468</u>
	50-615	3	202	6	4	NJA	3/7/18	AM	-	_	1.							CLABOD
	FO - BROADWAY	3	HOME	6	2	7	3/4/18		-	-	<b>B</b> .			V	1			ORAB
	PE-E	3	1	1	Ī	1	3/2/18		_	_	6				<b>!</b>			03AB
	PE-C	3					1 1	1	_	-	6				V,			CYAB
	PE-W	2	V	V	V	V	<b>V</b>	<b>√</b>	_	_	6				✓.			CYAR
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627	Relinquished By:		Date: 3	- 17	-1//	Receiv	€¢ By:		<u> </u>	Date:	3 -13	2-10	EMT USE	ONLY	,			AMPLE RECEIVED
	Mill Addin		ime:	1:35		16	har	2			133:0		Client C	`odo:				ON ICE
	Relinquished By:		Date: 3			Receiv	ed By:			Date:		> _	EMT Pro		 D.			EMPERATURE Must be recorded if sampling vas greater than 6 hrs. prior to
	1 + 1	-	Time: 1	-						Time:	,			,	100		S	ample receipt)
	Relinquished By:		Date:	110		Receiv	ed For Lo	nh Bw		100 1 100 1	3 -13	18	Jar Lot 1	 Vo.				4.0
ag			Time:	- ;	_	1.0001.			~		17 /		00.00.					MT SAMPLE RETURN POLICY ON BACK
0 7	PECIAL INSTRUCTIO	NS:	13 G	ZAMAK	AA 2	DED	TO"	FO-1	3220	DIAN	, BA	PIA	TICN	10UL	DI		•	•
7			an.	tilan a	out V	MI "	PE'' 5			() W	-/	12	ハエしい					
	EMT-FORM-GEN-028		( VOC	into (	MLI	uo [	E 5	amples										

# Sample Receipt Checklist

Work Order: 18C0468

Printed: 3/14/2018 7:59:26AM

Client:

United Engineering Consultants, Inc.

PM or Client Contacted

Project: Waste Characterization

Date Due:

03/20/18 17:00 (5 day TAT)

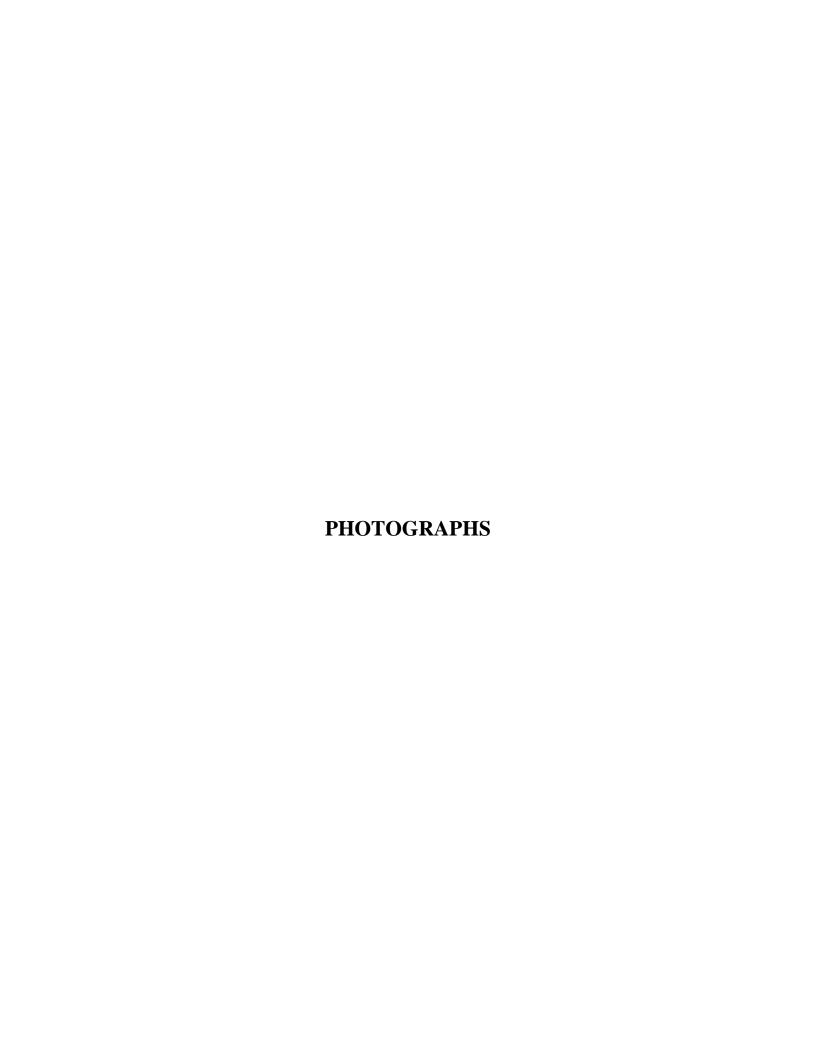
Received By: Date Received: Steven Legacki 03/13/18 17:15 Logged In By: Steven Legacki Date Logged In: 03/13/18 18:00 Samples Received at: 2°C How were samples received? **EMT Custody Seals Present** No Custody Seals Intact NA Sample Cont/Cooler Intact Yes COC Present/Complete Yes COC/Labels Agree Yes Proper Cont/Preservation checked No Sufficient Sample Volume Yes Samples Within Holdtime Yes Cooler Temp Within Limits Yes VOA Water Vials Received No VOA Water Vials/Zero Headspace NA

#### **COMMENTS**

Yes

Chain says vials have MeOH, vials do not say they are preserved

17/18





ONE THOUSAND (1,000) GALLON WASTE OIL UNDERGROUND STORAGE TANK (UST) DURING EXCAVATION



ONE THOUSAND (1,000) GALLON WASTE OIL UST PRIOR TO REMOVAL



EXCAVATION LIMITS LOOKING SOUTH SUBSEQUENT TO REMOVAL OF ONE THOUSAND (1,000) GALLON WASTE OIL UST



ONE THOUSAND (1,000) GALLON WASTE OIL UST SUBSEQUENT TO REMOVAL AND LABELING



ONE THOUSAND (1,000) GALLON WASTE OIL UST SUBSEQUENT TO REMOVAL, CLEANING AND LABELING



EXCAVATION LIMITS LOOKING EAST SUBSEQUENT TO REMOVAL OF ONE THOUSAND (1,000) GALLON WASTE OIL UST AND OVER-EXCAVATION OF WASTE OIL IMPACTED SOIL



FOUR THOUSAND (4,000) GALLON UST DURING EXCAVATION LOOKING EAST



FOUR THOUSAND (4,000) GALLON UST PRIOR TO REMOVAL LOOKING WEST-SOUTHWEST



EXCAVATION LIMITS LOOKING SOUTHWEST SUBSEQUENT TO THE REMOVAL OF THE FOUR THOUSAND (4,000) GALLON UST



FOUR THOUSAND (4,000) GALLON UST SUBSEQUENT TO REMOVAL AND LABELING



FOUR THOUSAND (4,000) GALLON UST SUBSEQUENT TO REMOVAL AND LABELING



FOUR THOUSAND (4,000) GALLON UST SUBSEQUENT TO REMOVAL, CLEANING AND LABELING



EXCAVATION LIMITS LOOKING EAST SUBSEQUENT TO THE REMOVAL OF THE FOUR THOUSAND (4,000) GALLON UST AND OVER-EXCAVATION OF IMPACTED SOILS