

**Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003**

**Notice: Hazardous substance discharges must be reported immediately** according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than \$10 nor more than \$5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 – 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from (**check one**):

- Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- Aboveground Petroleum Storage Tank System
- Dry Cleaner Facility
- Other - Describe: \_\_\_\_\_

ATTN DNR: **R & R Program Associate**

Date DNR Notified: **07/08/2019**

**1. Discharge Reported By**

Name <b>NICHOLAS ANDERSON</b>	Firm <b>UNITED ENGINEERING CONSULTANT</b>	Phone Number (include area code) <b>(262) 785-1447</b>
Mailing Address <b>16237 W. RYERSON ROAD</b>	Email <b>NAUEC@SBCGLOBAL.NET</b>	

**2. Site Information**

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property.

**ONE HOUR MARTINIZING - MILWAUKEE / WISCONSIN AUTO TITLE LOANS**

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60.

**233/235 W. LAYTON AVENUE**

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.

**MILWAUKEE**

County <b>Milwaukee</b>	Legal Description: <b>NE ¼ of NE ¼ Section 29', Town 06 N, Range 22</b> <input checked="" type="radio"/> E <input type="radio"/> W	WTM: <b>X 690122 Y 278355</b>
----------------------------	---	----------------------------------

**3. Responsible Party (RP) and/or RP Representative**

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

**GOTTFRIED REAL ESTATE LLC**

A local governmental unit claiming an exemption from state Spill Law and Solid Waste Management responsibilities for the discharge being reported, per Wis. Stat. §§ 292.11(9)(e) and 292.23, should: 1) check this box; 2) review [DNR publication RR-055](#); and 3) provide documentation to DNR that demonstrates compliance with the statutory requirements of the liability exemptions. Local governmental units may also request a fee-based liability clarification letter from DNR by using [DNR Form 4400-237](#).

Contact Person Name (if different) <b>BRIAN GOTTFRIED</b>	Phone Number <b>(414) 416-5665</b>	Email <b>JEROMEMUSKEGO@AMERITECH.NET</b>		
Mailing Address <b>PO BOX 26</b>	City <b>MUSKEGO</b>	State <b>WI</b>	ZIP Code <b>53150</b>	

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email		
Mailing Address	City	State	ZIP Code	

(continued)

## Notification For Hazardous Substance Discharge (Non-Emergency Only)

### 4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> VOCs<br><input checked="" type="checkbox"/> PCE<br><input type="checkbox"/> TCE<br><input type="checkbox"/> Other Chlorinated<br><input type="checkbox"/> Diesel<br><input type="checkbox"/> Fuel Oil<br><input type="checkbox"/> Gasoline<br><input type="checkbox"/> Hydraulic Oil<br><input type="checkbox"/> Jet Fuel | <i>(VOCs continued)</i><br><input type="checkbox"/> Mineral Oil<br><input type="checkbox"/> Waste Oil<br><input type="checkbox"/> Petroleum-Unknown Type<br><input type="checkbox"/> PAHs<br><input type="checkbox"/> PCBs<br><input type="checkbox"/> Cyanide<br><input type="checkbox"/> Leachate<br><input type="checkbox"/> Manure | <input type="checkbox"/> Metals<br><input type="checkbox"/> Arsenic<br><input type="checkbox"/> Chromium<br><input type="checkbox"/> Lead<br><input type="checkbox"/> Other: _____<br><input type="checkbox"/> Pesticides: _____<br><input type="checkbox"/> Fertilizer: _____<br><input type="checkbox"/> RCRA Hazardous Waste: _____<br><input type="checkbox"/> Other: _____<br><input type="checkbox"/> Unknown |
|---|--|---|

### 5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Air Contamination   | <input type="checkbox"/> Fire Explosion Threat                | <input checked="" type="checkbox"/> Soil Contamination           |
| <input type="checkbox"/> Co-mingled (Petroleum & Non-Petroleum) Contamination in Fractured Bedrock | <input type="checkbox"/> Free Product                         | <input type="checkbox"/> Soil Gas Contamination                  |
| <input type="checkbox"/> Contamination Within 1 Meter of Bedrock                                   | <input checked="" type="checkbox"/> Groundwater Contamination | <input checked="" type="checkbox"/> Sub-slab Vapor Contamination |
| <input type="checkbox"/> Contaminated Private Well   | <input type="checkbox"/> Off-Site Contamination               | <input type="checkbox"/> Surface Water Contamination             |
| <input type="checkbox"/> Contaminated Public Well  | <input type="checkbox"/> Sanitary Sewer Contamination         | <input type="checkbox"/> Within 100 ft of Private Well           |
| <input checked="" type="checkbox"/> Contamination in Right of Way                                  | <input type="checkbox"/> Storm Sewer Contamination            | <input type="checkbox"/> Within 1000 ft of Public Well           |
|  | <input type="checkbox"/> Sediment Contamination               |  |
|  | Other (specify): _____  |  |

Contamination was discovered as a result of:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Tank closure assessment | <input checked="" type="checkbox"/> Site assessment | <input type="checkbox"/> Other - Describe: _____ |
| Date: <input type="text"/>                       | Date: <input type="text" value="05/01/2019"/>       | Date: <input type="text"/>                       |

Lab results:  Lab results will be faxed upon receipt  Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.

### 6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

	Source	Cause
For all confirmed releases from USTs occurring after 9/30/2007 please provide the following information:  <input checked="" type="checkbox"/> Does not apply.	<input type="checkbox"/> Tank <input type="checkbox"/> Piping <input type="checkbox"/> Dispenser <input type="checkbox"/> Submersible Turbine Pump <input type="checkbox"/> Delivery Problem  <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Spill <input type="checkbox"/> Overfill <input type="checkbox"/> Corrosion <input type="checkbox"/> Physical or Mechanical Damage <input type="checkbox"/> Installation Problem <input type="checkbox"/> Other (does not fit any of above) <input type="checkbox"/> Unknown

Contact information to report non-emergency releases in DNR's five regions are as follows:

- Northeast Region (FAX: 920-662-5413); Attention -- R&R Program Associate:** DNRRRNER@wisconsin.gov  
 Brown, Calumet, Door, Fond du Lac (**except City of Waupun - see South Central Region**), Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties
- Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate:** DNRRRNOR@wisconsin.gov  
 Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties
- South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate:** DNRRRSCR@wisconsin.gov  
 Columbia, Dane, Dodge, Fond du Lac (**City of Waupun only**), Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties
- Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate:** DNRRRSER@wisconsin.gov  
 Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties



## Notification For Hazardous Substance Discharge (Non-Emergency Only)

NICHOLAS ANDERSON UNITED ENGINEERING CONSULTANT

Form 4400-225 (R 06/17)

Page 3 of 3

**West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: [DNRRRWCR@wisconsin.gov](mailto:DNRRRWCR@wisconsin.gov)**

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties

## Analytical Report

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

May 13, 2019

Work Order: 19E0242

RE: UEC Analysis  
19006

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,



Jacoby Jackson  
Project Manager  
847.967.6666  
jjackson@emt.com  
Approved for release: 5/13/2019 8:24:41AM

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

## *Table of Contents*

<i>Cover Letter</i>	<i>1</i>
<i>Sample Summary</i>	<i>3</i>
<i>Case Narrative</i>	<i>4</i>
<i>Client Sample Results</i>	<i>5</i>
<i>Dates Report</i>	<i>29</i>
<i>Quality Control</i>	<i>30</i>
<i>Certified Analyses</i>	<i>39</i>
<i>List of Certifications</i>	<i>41</i>
<i>Qualifiers and Definitions</i>	<i>42</i>
<i>Chain of Custody</i>	<i>43</i>

### Sample Summary

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
GP-1 2'-3'	19E0242-01	Soil	05/01/19 12:30	05/03/19 16:45
GP-1 5'-6'	19E0242-02	Soil	05/01/19 12:45	05/03/19 16:45
GP-1 13'-14'	19E0242-03	Soil	05/01/19 13:00	05/03/19 16:45
GP-2 3'-4'	19E0242-04	Soil	05/01/19 13:30	05/03/19 16:45
GP-2 7'-8'	19E0242-05	Soil	05/01/19 13:45	05/03/19 16:45
GP-2 15'-16'	19E0242-06	Soil	05/01/19 14:00	05/03/19 16:45
GP-3 3'-4'	19E0242-07	Soil	05/01/19 14:30	05/03/19 16:45
GP-3 6'-7'	19E0242-08	Soil	05/01/19 14:45	05/03/19 16:45
GP-3 13'-14'	19E0242-09	Soil	05/01/19 15:00	05/03/19 16:45
TW1	19E0242-10	Water	05/01/19 13:15	05/03/19 16:45
TW2	19E0242-11	Water	05/01/19 14:15	05/03/19 16:45
TW3	19E0242-12	Water	05/01/19 15:15	05/03/19 16:45

## Case Narrative

**Client:** United Engineering Consultants, Inc.

**Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Work Order:** 19E0242

---

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: 19E0242**

The samples were received on 05/03/19 16:45. 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	1.6

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

### Client Sample Results

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 2'-3'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 12:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-01

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF			
		Reporting	Limit							Qual		
<b>Wet Chemistry</b>												
Method: SM2540G												
Total Solids	77.3	0.100		% (Percent)	0.00500	05/07/19 15:52	B9E0235	TB2	1			
<b>Volatile Organic Compounds by GC/MS</b>												
Method: SW-846 8260B/WDNR: PUBL-FW-140												
1,1,1-Trichloroethane	< 28.9	28.9		ug/Kg dry	28.9	05/07/19 06:13	B9E0360	JL	50			
1,1,2,2-Tetrachloroethane	< 28.0	28.0		ug/Kg dry	28.0	05/07/19 06:13	B9E0360	JL	50			
1,1,2-Trichloroethane	< 28.7	28.7		ug/Kg dry	28.7	05/07/19 06:13	B9E0360	JL	50			
1,1-Dichloroethane	< 43.5	43.5		ug/Kg dry	43.5	05/07/19 06:13	B9E0360	JL	50			
1,1-Dichloroethene	< 34.0	34.0		ug/Kg dry	34.0	05/07/19 06:13	B9E0360	JL	50			
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	16.8	05/07/19 06:13	B9E0360	JL	50			
1,2-Dibromo-3-chloropropane	< 47.6	47.6		ug/Kg dry	47.6	05/07/19 06:13	B9E0360	JL	50			
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	14.6	05/07/19 06:13	B9E0360	JL	50			
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	10.5	05/07/19 06:13	B9E0360	JL	50			
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	19.5	05/07/19 06:13	B9E0360	JL	50			
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	16.4	05/07/19 06:13	B9E0360	JL	50			
1-Butanol	< 498	498		ug/Kg dry	498	05/07/19 06:13	B9E0360	JL	50			
2-Butanone	< 124	124		ug/Kg dry	124	05/07/19 06:13	B9E0360	JL	50			
2-Hexanone	< 85.5	85.5		ug/Kg dry	85.5	05/07/19 06:13	B9E0360	JL	50			
4-Methyl-2-pentanone	< 57.6	57.6		ug/Kg dry	57.6	05/07/19 06:13	B9E0360	JL	50			
Acetone	< 212	212		ug/Kg dry	212	05/07/19 06:13	B9E0360	JL	50			
Acrylonitrile	< 61.1	61.1		ug/Kg dry	61.1	05/07/19 06:13	B9E0360	JL	50			
Benzene	< 25.0	25.0		ug/Kg dry	12.5	05/07/19 06:13	B9E0360	JL	50			
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	18.7	05/07/19 06:13	B9E0360	JL	50			
Bromoform	< 25.0	25.0		ug/Kg dry	20.3	05/07/19 06:13	B9E0360	JL	50			
Carbon disulfide	< 25.0	25.0		ug/Kg dry	15.2	05/07/19 06:13	B9E0360	JL	50			
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	13.1	05/07/19 06:13	B9E0360	JL	50			
Chlorobenzene	< 25.0	25.0		ug/Kg dry	14.5	05/07/19 06:13	B9E0360	JL	50			
Chloroform	< 27.0	27.0		ug/Kg dry	27.0	05/07/19 06:13	B9E0360	JL	50			
cis-1,2-Dichloroethene	< 29.8	29.8		ug/Kg dry	29.8	05/07/19 06:13	B9E0360	JL	50			
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	23.6	05/07/19 06:13	B9E0360	JL	50			
Ethylbenzene	< 25.0	25.0		ug/Kg dry	18.6	05/07/19 06:13	B9E0360	JL	50			
m,p-Xylene	< 92.4	92.4		ug/Kg dry	92.4	05/07/19 06:13	B9E0360	JL	50			
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	21.7	05/07/19 06:13	B9E0360	JL	50			
Methylene chloride	< 50.9	50.9		ug/Kg dry	50.9	05/07/19 06:13	B9E0360	JL	50			
o-Xylene	< 25.0	25.0		ug/Kg dry	12.9	05/07/19 06:13	B9E0360	JL	50			
Styrene	< 25.0	25.0		ug/Kg dry	18.6	05/07/19 06:13	B9E0360	JL	50			
<b>Tetrachloroethene</b>	<b>347</b>	25.0		ug/Kg dry	22.5	05/07/19 06:13	B9E0360	JL	50			
Toluene	< 25.0	25.0		ug/Kg dry	16.9	05/07/19 06:13	B9E0360	JL	50			
trans-1,2-Dichloroethene	< 41.0	41.0		ug/Kg dry	41.0	05/07/19 06:13	B9E0360	JL	50			
Trichloroethene	< 25.0	25.0		ug/Kg dry	15.0	05/07/19 06:13	B9E0360	JL	50			
Vinyl acetate	< 33.3	33.3		ug/Kg dry	33.3	05/07/19 06:13	B9E0360	JL	50			
Vinyl chloride	< 25.0	25.0		ug/Kg dry	20.5	05/07/19 06:13	B9E0360	JL	50			
Xylenes, Total	< 105	105		ug/Kg dry	105	05/07/19 06:13	B9E0360	JL	50			
1,2-Dichloroethene, Total	< 70.8	70.8		ug/Kg dry	70.8	05/07/19 06:13	B9E0360	JL	50			
-----												
<i>Surrogate: Dibromofluoromethane</i>				<i>Recovery: 103%</i>		<i>Limits: 78-137</i>		<i>05/07/19 06:13</i>		<i>B9E0360</i>	<i>JL</i>	<i>50</i>



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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 2'-3'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 12:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-01 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4			Recovery: 112%	Limits: 86-137	05/07/19 06:13	B9E0360	JL	50
Surrogate: Fluorobenzene			Recovery: 99%	Limits: 80-120	05/07/19 06:13	B9E0360	JL	50
Surrogate: Toluene-d8			Recovery: 94%	Limits: 73-112	05/07/19 06:13	B9E0360	JL	50
Surrogate: 4-Bromofluorobenzene			Recovery: 95%	Limits: 85-120	05/07/19 06:13	B9E0360	JL	50
Surrogate: 1,2-Dichlorobenzene-d4			Recovery: 110%	Limits: 85-128	05/07/19 06:13	B9E0360	JL	50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 5'-6'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 12:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-02

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	83.2	0.100		% (Percent)	0.00500	05/07/19 15:54	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 25.0	25.0		ug/Kg dry	23.4	05/07/19 06:47	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 25.0	25.0		ug/Kg dry	22.7	05/07/19 06:47	B9E0360	JL	50	
1,1,2-Trichloroethane	< 25.0	25.0		ug/Kg dry	23.3	05/07/19 06:47	B9E0360	JL	50	
1,1-Dichloroethane	< 35.2	35.2		ug/Kg dry	35.2	05/07/19 06:47	B9E0360	JL	50	
1,1-Dichloroethene	< 27.6	27.6		ug/Kg dry	27.6	05/07/19 06:47	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	13.6	05/07/19 06:47	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 38.6	38.6		ug/Kg dry	38.6	05/07/19 06:47	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	11.8	05/07/19 06:47	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	8.55	05/07/19 06:47	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	15.8	05/07/19 06:47	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	13.3	05/07/19 06:47	B9E0360	JL	50	
1-Butanol	< 404	404		ug/Kg dry	404	05/07/19 06:47	B9E0360	JL	50	
2-Butanone	< 100	100		ug/Kg dry	100	05/07/19 06:47	B9E0360	JL	50	
2-Hexanone	< 69.3	69.3		ug/Kg dry	69.3	05/07/19 06:47	B9E0360	JL	50	
4-Methyl-2-pentanone	< 46.6	46.6		ug/Kg dry	46.6	05/07/19 06:47	B9E0360	JL	50	
Acetone	< 172	172		ug/Kg dry	172	05/07/19 06:47	B9E0360	JL	50	
Acrylonitrile	< 49.5	49.5		ug/Kg dry	49.5	05/07/19 06:47	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	10.1	05/07/19 06:47	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	15.1	05/07/19 06:47	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	16.5	05/07/19 06:47	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	12.3	05/07/19 06:47	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	10.7	05/07/19 06:47	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	11.7	05/07/19 06:47	B9E0360	JL	50	
Chloroform	< 25.0	25.0		ug/Kg dry	21.9	05/07/19 06:47	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 25.0	25.0		ug/Kg dry	24.2	05/07/19 06:47	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	19.2	05/07/19 06:47	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	15.1	05/07/19 06:47	B9E0360	JL	50	
m,p-Xylene	< 74.9	74.9		ug/Kg dry	74.9	05/07/19 06:47	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	17.6	05/07/19 06:47	B9E0360	JL	50	
Methylene chloride	< 41.2	41.2		ug/Kg dry	41.2	05/07/19 06:47	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	10.4	05/07/19 06:47	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	15.0	05/07/19 06:47	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>1230</b>	25.0		ug/Kg dry	18.3	05/07/19 06:47	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	13.7	05/07/19 06:47	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 33.2	33.2		ug/Kg dry	33.2	05/07/19 06:47	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	12.2	05/07/19 06:47	B9E0360	JL	50	
Vinyl acetate	< 27.0	27.0		ug/Kg dry	27.0	05/07/19 06:47	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	16.7	05/07/19 06:47	B9E0360	JL	50	
Xylenes, Total	< 85.3	85.3		ug/Kg dry	85.3	05/07/19 06:47	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 57.4	57.4		ug/Kg dry	57.4	05/07/19 06:47	B9E0360	JL	50	
-----										
<i>Surrogate: Dibromofluoromethane</i>				Recovery: 109%		Limits: 78-137	05/07/19 06:47	B9E0360	JL	50

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 5'-6'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 12:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-02 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 118%	Limits: 86-137	05/07/19 06:47	B9E0360	JL 50
Surrogate: Fluorobenzene				Recovery: 100%	Limits: 80-120	05/07/19 06:47	B9E0360	JL 50
Surrogate: Toluene-d8				Recovery: 91%	Limits: 73-112	05/07/19 06:47	B9E0360	JL 50
Surrogate: 4-Bromofluorobenzene				Recovery: 99%	Limits: 85-120	05/07/19 06:47	B9E0360	JL 50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 111%	Limits: 85-128	05/07/19 06:47	B9E0360	JL 50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 13'-14'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-03

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Reporting Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	95.4	0.100		% (Percent)	0.00500	05/07/19 15:56	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 27.9	27.9		ug/Kg dry	27.9	05/07/19 07:21	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 26.9	26.9		ug/Kg dry	26.9	05/07/19 07:21	B9E0360	JL	50	
1,1,2-Trichloroethane	< 27.7	27.7		ug/Kg dry	27.7	05/07/19 07:21	B9E0360	JL	50	
1,1-Dichloroethane	< 41.9	41.9		ug/Kg dry	41.9	05/07/19 07:21	B9E0360	JL	50	
1,1-Dichloroethene	< 32.8	32.8		ug/Kg dry	32.8	05/07/19 07:21	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	16.2	05/07/19 07:21	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 45.9	45.9		ug/Kg dry	45.9	05/07/19 07:21	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	14.0	05/07/19 07:21	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	10.2	05/07/19 07:21	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	18.8	05/07/19 07:21	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	15.8	05/07/19 07:21	B9E0360	JL	50	
1-Butanol	< 480	480		ug/Kg dry	480	05/07/19 07:21	B9E0360	JL	50	
2-Butanone	< 119	119		ug/Kg dry	119	05/07/19 07:21	B9E0360	JL	50	
2-Hexanone	< 82.3	82.3		ug/Kg dry	82.3	05/07/19 07:21	B9E0360	JL	50	
4-Methyl-2-pentanone	< 55.5	55.5		ug/Kg dry	55.5	05/07/19 07:21	B9E0360	JL	50	
Acetone	< 205	205		ug/Kg dry	205	05/07/19 07:21	B9E0360	JL	50	
Acrylonitrile	< 58.8	58.8		ug/Kg dry	58.8	05/07/19 07:21	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	12.1	05/07/19 07:21	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	18.0	05/07/19 07:21	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	19.6	05/07/19 07:21	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	14.6	05/07/19 07:21	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	12.7	05/07/19 07:21	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	13.9	05/07/19 07:21	B9E0360	JL	50	
Chloroform	< 26.0	26.0		ug/Kg dry	26.0	05/07/19 07:21	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 28.7	28.7		ug/Kg dry	28.7	05/07/19 07:21	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	22.8	05/07/19 07:21	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	17.9	05/07/19 07:21	B9E0360	JL	50	
m,p-Xylene	< 89.1	89.1		ug/Kg dry	89.1	05/07/19 07:21	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	20.9	05/07/19 07:21	B9E0360	JL	50	
Methylene chloride	< 49.0	49.0		ug/Kg dry	49.0	05/07/19 07:21	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	12.4	05/07/19 07:21	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	17.9	05/07/19 07:21	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>1530</b>	25.0		ug/Kg dry	21.7	05/07/19 07:21	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	16.3	05/07/19 07:21	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 39.5	39.5		ug/Kg dry	39.5	05/07/19 07:21	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	14.5	05/07/19 07:21	B9E0360	JL	50	
Vinyl acetate	< 32.1	32.1		ug/Kg dry	32.1	05/07/19 07:21	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	19.8	05/07/19 07:21	B9E0360	JL	50	
Xylenes, Total	< 101	101		ug/Kg dry	101	05/07/19 07:21	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 68.2	68.2		ug/Kg dry	68.2	05/07/19 07:21	B9E0360	JL	50	
-----										
<i>Surrogate: Dibromofluoromethane</i>				Recovery: 112%		Limits: 78-137	05/07/19 07:21	B9E0360	JL	50

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-1 13'-14'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-03 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 118%	Limits: 86-137	05/07/19 07:21	B9E0360	JL 50
Surrogate: Fluorobenzene				Recovery: 99%	Limits: 80-120	05/07/19 07:21	B9E0360	JL 50
Surrogate: Toluene-d8				Recovery: 90%	Limits: 73-112	05/07/19 07:21	B9E0360	JL 50
Surrogate: 4-Bromofluorobenzene				Recovery: 102%	Limits: 85-120	05/07/19 07:21	B9E0360	JL 50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 113%	Limits: 85-128	05/07/19 07:21	B9E0360	JL 50



## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 3'-4'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-04

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Reporting Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	83.6	0.100		% (Percent)	0.00500	05/07/19 15:58	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 26.5	26.5		ug/Kg dry	26.5	05/07/19 07:54	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 25.6	25.6		ug/Kg dry	25.6	05/07/19 07:54	B9E0360	JL	50	
1,1,2-Trichloroethane	< 26.3	26.3		ug/Kg dry	26.3	05/07/19 07:54	B9E0360	JL	50	
1,1-Dichloroethane	< 39.8	39.8		ug/Kg dry	39.8	05/07/19 07:54	B9E0360	JL	50	
1,1-Dichloroethene	< 31.1	31.1		ug/Kg dry	31.1	05/07/19 07:54	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	15.4	05/07/19 07:54	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 43.6	43.6		ug/Kg dry	43.6	05/07/19 07:54	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	13.3	05/07/19 07:54	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	9.65	05/07/19 07:54	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	17.9	05/07/19 07:54	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	15.1	05/07/19 07:54	B9E0360	JL	50	
1-Butanol	< 456	456		ug/Kg dry	456	05/07/19 07:54	B9E0360	JL	50	
2-Butanone	< 113	113		ug/Kg dry	113	05/07/19 07:54	B9E0360	JL	50	
2-Hexanone	< 78.2	78.2		ug/Kg dry	78.2	05/07/19 07:54	B9E0360	JL	50	
4-Methyl-2-pentanone	< 52.7	52.7		ug/Kg dry	52.7	05/07/19 07:54	B9E0360	JL	50	
Acetone	< 194	194		ug/Kg dry	194	05/07/19 07:54	B9E0360	JL	50	
Acrylonitrile	< 55.9	55.9		ug/Kg dry	55.9	05/07/19 07:54	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	11.5	05/07/19 07:54	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	17.1	05/07/19 07:54	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	18.6	05/07/19 07:54	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	13.9	05/07/19 07:54	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	12.0	05/07/19 07:54	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	13.2	05/07/19 07:54	B9E0360	JL	50	
Chloroform	< 25.0	25.0		ug/Kg dry	24.7	05/07/19 07:54	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 27.3	27.3		ug/Kg dry	27.3	05/07/19 07:54	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	21.6	05/07/19 07:54	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	17.0	05/07/19 07:54	B9E0360	JL	50	
m,p-Xylene	< 84.6	84.6		ug/Kg dry	84.6	05/07/19 07:54	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	19.9	05/07/19 07:54	B9E0360	JL	50	
Methylene chloride	< 46.6	46.6		ug/Kg dry	46.6	05/07/19 07:54	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	11.8	05/07/19 07:54	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	17.0	05/07/19 07:54	B9E0360	JL	50	
Tetrachloroethene	< 25.0	25.0		ug/Kg dry	20.6	05/07/19 07:54	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	15.5	05/07/19 07:54	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 37.5	37.5		ug/Kg dry	37.5	05/07/19 07:54	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	13.7	05/07/19 07:54	B9E0360	JL	50	
Vinyl acetate	< 30.5	30.5		ug/Kg dry	30.5	05/07/19 07:54	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	18.8	05/07/19 07:54	B9E0360	JL	50	
Xylenes, Total	< 96.4	96.4		ug/Kg dry	96.4	05/07/19 07:54	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 64.8	64.8		ug/Kg dry	64.8	05/07/19 07:54	B9E0360	JL	50	
Surrogate: Dibromofluoromethane Recovery: 108% Limits: 78-137 05/07/19 07:54 B9E0360 JL 50										

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 3'-4'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-04 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 117%	Limits: 86-137	05/07/19 07:54	B9E0360	JL 50
Surrogate: Fluorobenzene				Recovery: 100%	Limits: 80-120	05/07/19 07:54	B9E0360	JL 50
Surrogate: Toluene-d8				Recovery: 90%	Limits: 73-112	05/07/19 07:54	B9E0360	JL 50
Surrogate: 4-Bromofluorobenzene				Recovery: 103%	Limits: 85-120	05/07/19 07:54	B9E0360	JL 50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 113%	Limits: 85-128	05/07/19 07:54	B9E0360	JL 50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 7'-8'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-05

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Reporting Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	85.1	0.100		% (Percent)	0.00500	05/07/19 16:00	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 25.0	25.0		ug/Kg dry	22.0	05/07/19 08:28	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 25.0	25.0		ug/Kg dry	21.3	05/07/19 08:28	B9E0360	JL	50	
1,1,2-Trichloroethane	< 25.0	25.0		ug/Kg dry	21.8	05/07/19 08:28	B9E0360	JL	50	
1,1-Dichloroethane	< 33.1	33.1		ug/Kg dry	33.1	05/07/19 08:28	B9E0360	JL	50	
1,1-Dichloroethene	< 25.9	25.9		ug/Kg dry	25.9	05/07/19 08:28	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	12.8	05/07/19 08:28	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 36.2	36.2		ug/Kg dry	36.2	05/07/19 08:28	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	11.1	05/07/19 08:28	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	8.02	05/07/19 08:28	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	14.8	05/07/19 08:28	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	12.5	05/07/19 08:28	B9E0360	JL	50	
1-Butanol	< 379	379		ug/Kg dry	379	05/07/19 08:28	B9E0360	JL	50	
2-Butanone	< 94.1	94.1		ug/Kg dry	94.1	05/07/19 08:28	B9E0360	JL	50	
2-Hexanone	< 65.0	65.0		ug/Kg dry	65.0	05/07/19 08:28	B9E0360	JL	50	
4-Methyl-2-pentanone	< 43.8	43.8		ug/Kg dry	43.8	05/07/19 08:28	B9E0360	JL	50	
Acetone	< 161	161		ug/Kg dry	161	05/07/19 08:28	B9E0360	JL	50	
Acrylonitrile	< 46.4	46.4		ug/Kg dry	46.4	05/07/19 08:28	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	9.51	05/07/19 08:28	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	14.2	05/07/19 08:28	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	15.5	05/07/19 08:28	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	11.6	05/07/19 08:28	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	9.99	05/07/19 08:28	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	11.0	05/07/19 08:28	B9E0360	JL	50	
Chloroform	< 25.0	25.0		ug/Kg dry	20.5	05/07/19 08:28	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 25.0	25.0		ug/Kg dry	22.7	05/07/19 08:28	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	18.0	05/07/19 08:28	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	14.1	05/07/19 08:28	B9E0360	JL	50	
m,p-Xylene	< 70.3	70.3		ug/Kg dry	70.3	05/07/19 08:28	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	16.5	05/07/19 08:28	B9E0360	JL	50	
Methylene chloride	< 38.7	38.7		ug/Kg dry	38.7	05/07/19 08:28	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	9.77	05/07/19 08:28	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	14.1	05/07/19 08:28	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>253</b>	25.0		ug/Kg dry	17.1	05/07/19 08:28	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	12.8	05/07/19 08:28	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 31.2	31.2		ug/Kg dry	31.2	05/07/19 08:28	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	11.4	05/07/19 08:28	B9E0360	JL	50	
Vinyl acetate	< 25.3	25.3		ug/Kg dry	25.3	05/07/19 08:28	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	15.6	05/07/19 08:28	B9E0360	JL	50	
Xylenes, Total	< 80.1	80.1		ug/Kg dry	80.1	05/07/19 08:28	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 53.9	53.9		ug/Kg dry	53.9	05/07/19 08:28	B9E0360	JL	50	
Surrogate: Dibromofluoromethane Recovery: 107% Limits: 78-137 05/07/19 08:28 B9E0360 JL 50										

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 7'-8'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-05 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 117% Limits: 86-137	05/07/19 08:28	B9E0360	JL	50
Surrogate: Fluorobenzene				Recovery: 99% Limits: 80-120	05/07/19 08:28	B9E0360	JL	50
Surrogate: Toluene-d8				Recovery: 92% Limits: 73-112	05/07/19 08:28	B9E0360	JL	50
Surrogate: 4-Bromofluorobenzene				Recovery: 92% Limits: 85-120	05/07/19 08:28	B9E0360	JL	50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 114% Limits: 85-128	05/07/19 08:28	B9E0360	JL	50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 15'-16'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-06

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Reporting	Limit							Qual
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	95.8	0.100		% (Percent)	0.00500	05/07/19 16:02	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 27.0	27.0		ug/Kg dry	27.0	05/07/19 09:02	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 26.1	26.1		ug/Kg dry	26.1	05/07/19 09:02	B9E0360	JL	50	
1,1,2-Trichloroethane	< 26.8	26.8		ug/Kg dry	26.8	05/07/19 09:02	B9E0360	JL	50	
1,1-Dichloroethane	< 40.6	40.6		ug/Kg dry	40.6	05/07/19 09:02	B9E0360	JL	50	
1,1-Dichloroethene	< 31.8	31.8		ug/Kg dry	31.8	05/07/19 09:02	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	15.7	05/07/19 09:02	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 44.5	44.5		ug/Kg dry	44.5	05/07/19 09:02	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	13.6	05/07/19 09:02	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	9.85	05/07/19 09:02	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	18.2	05/07/19 09:02	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	15.4	05/07/19 09:02	B9E0360	JL	50	
1-Butanol	< 465	465		ug/Kg dry	465	05/07/19 09:02	B9E0360	JL	50	
2-Butanone	< 116	116		ug/Kg dry	116	05/07/19 09:02	B9E0360	JL	50	
2-Hexanone	< 79.8	79.8		ug/Kg dry	79.8	05/07/19 09:02	B9E0360	JL	50	
4-Methyl-2-pentanone	< 53.8	53.8		ug/Kg dry	53.8	05/07/19 09:02	B9E0360	JL	50	
Acetone	< 198	198		ug/Kg dry	198	05/07/19 09:02	B9E0360	JL	50	
Acrylonitrile	< 57.0	57.0		ug/Kg dry	57.0	05/07/19 09:02	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	11.7	05/07/19 09:02	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	17.4	05/07/19 09:02	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	19.0	05/07/19 09:02	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	14.2	05/07/19 09:02	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	12.3	05/07/19 09:02	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	13.5	05/07/19 09:02	B9E0360	JL	50	
Chloroform	< 25.2	25.2		ug/Kg dry	25.2	05/07/19 09:02	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 27.8	27.8		ug/Kg dry	27.8	05/07/19 09:02	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	22.1	05/07/19 09:02	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	17.4	05/07/19 09:02	B9E0360	JL	50	
m,p-Xylene	< 86.4	86.4		ug/Kg dry	86.4	05/07/19 09:02	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	20.3	05/07/19 09:02	B9E0360	JL	50	
Methylene chloride	< 47.5	47.5		ug/Kg dry	47.5	05/07/19 09:02	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	12.0	05/07/19 09:02	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	17.3	05/07/19 09:02	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>6110</b>	25.0		ug/Kg dry	21.0	05/07/19 09:02	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	15.8	05/07/19 09:02	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 38.3	38.3		ug/Kg dry	38.3	05/07/19 09:02	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	14.0	05/07/19 09:02	B9E0360	JL	50	
Vinyl acetate	< 31.1	31.1		ug/Kg dry	31.1	05/07/19 09:02	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	19.2	05/07/19 09:02	B9E0360	JL	50	
Xylenes, Total	< 98.4	98.4		ug/Kg dry	98.4	05/07/19 09:02	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 66.2	66.2		ug/Kg dry	66.2	05/07/19 09:02	B9E0360	JL	50	
-----										
<i>Surrogate: Dibromofluoromethane</i>				Recovery: 109%		Limits: 78-137	05/07/19 09:02	B9E0360	JL	50



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

### Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-2 15'-16'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-06 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 115% Limits: 86-137	05/07/19 09:02	B9E0360	JL	50
Surrogate: Fluorobenzene				Recovery: 98% Limits: 80-120	05/07/19 09:02	B9E0360	JL	50
Surrogate: Toluene-d8				Recovery: 90% Limits: 73-112	05/07/19 09:02	B9E0360	JL	50
Surrogate: 4-Bromofluorobenzene				Recovery: 102% Limits: 85-120	05/07/19 09:02	B9E0360	JL	50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 110% Limits: 85-128	05/07/19 09:02	B9E0360	JL	50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 3'-4'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-07

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	85.1	0.100		% (Percent)	0.00500	05/07/19 16:04	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 30.6	30.6		ug/Kg dry	30.6	05/07/19 09:36	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 29.6	29.6		ug/Kg dry	29.6	05/07/19 09:36	B9E0360	JL	50	
1,1,2-Trichloroethane	< 30.4	30.4		ug/Kg dry	30.4	05/07/19 09:36	B9E0360	JL	50	
1,1-Dichloroethane	< 46.0	46.0		ug/Kg dry	46.0	05/07/19 09:36	B9E0360	JL	50	
1,1-Dichloroethene	< 36.0	36.0		ug/Kg dry	36.0	05/07/19 09:36	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	17.8	05/07/19 09:36	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 50.4	50.4		ug/Kg dry	50.4	05/07/19 09:36	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	15.4	05/07/19 09:36	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	11.2	05/07/19 09:36	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	20.7	05/07/19 09:36	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	17.4	05/07/19 09:36	B9E0360	JL	50	
1-Butanol	< 527	527		ug/Kg dry	527	05/07/19 09:36	B9E0360	JL	50	
2-Butanone	< 131	131		ug/Kg dry	131	05/07/19 09:36	B9E0360	JL	50	
2-Hexanone	< 90.5	90.5		ug/Kg dry	90.5	05/07/19 09:36	B9E0360	JL	50	
4-Methyl-2-pentanone	< 60.9	60.9		ug/Kg dry	60.9	05/07/19 09:36	B9E0360	JL	50	
Acetone	< 225	225		ug/Kg dry	225	05/07/19 09:36	B9E0360	JL	50	
Acrylonitrile	< 64.6	64.6		ug/Kg dry	64.6	05/07/19 09:36	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	13.2	05/07/19 09:36	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	19.8	05/07/19 09:36	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	21.5	05/07/19 09:36	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	16.1	05/07/19 09:36	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	13.9	05/07/19 09:36	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	15.3	05/07/19 09:36	B9E0360	JL	50	
Chloroform	< 28.6	28.6		ug/Kg dry	28.6	05/07/19 09:36	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 31.5	31.5		ug/Kg dry	31.5	05/07/19 09:36	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	25.0	05/07/19 09:36	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	19.7	05/07/19 09:36	B9E0360	JL	50	
m,p-Xylene	< 97.8	97.8		ug/Kg dry	97.8	05/07/19 09:36	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	23.0	05/07/19 09:36	B9E0360	JL	50	
Methylene chloride	< 53.8	53.8		ug/Kg dry	53.8	05/07/19 09:36	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	13.6	05/07/19 09:36	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	19.7	05/07/19 09:36	B9E0360	JL	50	
Tetrachloroethene	< 25.0	25.0		ug/Kg dry	23.8	05/07/19 09:36	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	17.9	05/07/19 09:36	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 43.4	43.4		ug/Kg dry	43.4	05/07/19 09:36	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	15.9	05/07/19 09:36	B9E0360	JL	50	
Vinyl acetate	< 35.3	35.3		ug/Kg dry	35.3	05/07/19 09:36	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	21.7	05/07/19 09:36	B9E0360	JL	50	
Xylenes, Total	< 111	111		ug/Kg dry	111	05/07/19 09:36	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 75.0	75.0		ug/Kg dry	75.0	05/07/19 09:36	B9E0360	JL	50	
Surrogate: Dibromofluoromethane Recovery: 111% Limits: 78-137 05/07/19 09:36 B9E0360 JL 50										

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 3'-4'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:30  
**Matrix:** Soil  
**Lab ID:** 19E0242-07 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 120% Limits: 86-137	05/07/19 09:36	B9E0360	JL	50
Surrogate: Fluorobenzene				Recovery: 101% Limits: 80-120	05/07/19 09:36	B9E0360	JL	50
Surrogate: Toluene-d8				Recovery: 90% Limits: 73-112	05/07/19 09:36	B9E0360	JL	50
Surrogate: 4-Bromofluorobenzene				Recovery: 100% Limits: 85-120	05/07/19 09:36	B9E0360	JL	50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 112% Limits: 85-128	05/07/19 09:36	B9E0360	JL	50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 6'-7'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-08

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	84.9	0.100		% (Percent)	0.00500	05/07/19 16:06	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 25.0	25.0		ug/Kg dry	24.1	05/07/19 10:09	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 25.0	25.0		ug/Kg dry	23.3	05/07/19 10:09	B9E0360	JL	50	
1,1,2-Trichloroethane	< 25.0	25.0		ug/Kg dry	23.9	05/07/19 10:09	B9E0360	JL	50	
1,1-Dichloroethane	< 36.2	36.2		ug/Kg dry	36.2	05/07/19 10:09	B9E0360	JL	50	
1,1-Dichloroethene	< 28.3	28.3		ug/Kg dry	28.3	05/07/19 10:09	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	14.0	05/07/19 10:09	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 39.6	39.6		ug/Kg dry	39.6	05/07/19 10:09	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	12.1	05/07/19 10:09	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	8.78	05/07/19 10:09	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	16.3	05/07/19 10:09	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	13.7	05/07/19 10:09	B9E0360	JL	50	
1-Butanol	< 415	415		ug/Kg dry	415	05/07/19 10:09	B9E0360	JL	50	
2-Butanone	< 103	103		ug/Kg dry	103	05/07/19 10:09	B9E0360	JL	50	
2-Hexanone	< 71.1	71.1		ug/Kg dry	71.1	05/07/19 10:09	B9E0360	JL	50	
4-Methyl-2-pentanone	< 47.9	47.9		ug/Kg dry	47.9	05/07/19 10:09	B9E0360	JL	50	
Acetone	< 177	177		ug/Kg dry	177	05/07/19 10:09	B9E0360	JL	50	
Acrylonitrile	< 50.8	50.8		ug/Kg dry	50.8	05/07/19 10:09	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	10.4	05/07/19 10:09	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	15.5	05/07/19 10:09	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	16.9	05/07/19 10:09	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	12.7	05/07/19 10:09	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	10.9	05/07/19 10:09	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	12.0	05/07/19 10:09	B9E0360	JL	50	
Chloroform	< 25.0	25.0		ug/Kg dry	22.5	05/07/19 10:09	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 25.0	25.0		ug/Kg dry	24.8	05/07/19 10:09	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	19.7	05/07/19 10:09	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	15.5	05/07/19 10:09	B9E0360	JL	50	
m,p-Xylene	< 77.0	77.0		ug/Kg dry	77.0	05/07/19 10:09	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	18.1	05/07/19 10:09	B9E0360	JL	50	
Methylene chloride	< 42.3	42.3		ug/Kg dry	42.3	05/07/19 10:09	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	10.7	05/07/19 10:09	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	15.5	05/07/19 10:09	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>100</b>	25.0		ug/Kg dry	18.8	05/07/19 10:09	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	14.1	05/07/19 10:09	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 34.2	34.2		ug/Kg dry	34.2	05/07/19 10:09	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	12.5	05/07/19 10:09	B9E0360	JL	50	
Vinyl acetate	< 27.7	27.7		ug/Kg dry	27.7	05/07/19 10:09	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	17.1	05/07/19 10:09	B9E0360	JL	50	
Xylenes, Total	< 87.7	87.7		ug/Kg dry	87.7	05/07/19 10:09	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 59.0	59.0		ug/Kg dry	59.0	05/07/19 10:09	B9E0360	JL	50	
<i>Surrogate: Dibromofluoromethane</i>					<i>Recovery: 114%</i>	<i>Limits: 78-137</i>	<i>05/07/19 10:09</i>	<i>B9E0360</i>	<i>JL</i>	<i>50</i>

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 6'-7'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:45  
**Matrix:** Soil  
**Lab ID:** 19E0242-08 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 120% Limits: 86-137	05/07/19 10:09	B9E0360	JL	50
Surrogate: Fluorobenzene				Recovery: 102% Limits: 80-120	05/07/19 10:09	B9E0360	JL	50
Surrogate: Toluene-d8				Recovery: 91% Limits: 73-112	05/07/19 10:09	B9E0360	JL	50
Surrogate: 4-Bromofluorobenzene				Recovery: 102% Limits: 85-120	05/07/19 10:09	B9E0360	JL	50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 114% Limits: 85-128	05/07/19 10:09	B9E0360	JL	50



## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 13'-14'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 15:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-09

Analyses	Result	EMT		Units	MDL	Date/Time Analyzed	Batch	Analyst	DF	
		Reporting Limit	Qual							
<b>Wet Chemistry</b>										
Method: SM2540G										
Total Solids	93.4	0.100		% (Percent)	0.00500	05/07/19 16:08	B9E0235	TB2	1	
<b>Volatile Organic Compounds by GC/MS</b>										
Method: SW-846 8260B/WDNR: PUBL-FW-140										
1,1,1-Trichloroethane	< 28.1	28.1		ug/Kg dry	28.1	05/07/19 10:43	B9E0360	JL	50	
1,1,2,2-Tetrachloroethane	< 27.2	27.2		ug/Kg dry	27.2	05/07/19 10:43	B9E0360	JL	50	
1,1,2-Trichloroethane	< 27.9	27.9		ug/Kg dry	27.9	05/07/19 10:43	B9E0360	JL	50	
1,1-Dichloroethane	< 42.3	42.3		ug/Kg dry	42.3	05/07/19 10:43	B9E0360	JL	50	
1,1-Dichloroethene	< 33.1	33.1		ug/Kg dry	33.1	05/07/19 10:43	B9E0360	JL	50	
1,2,4-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	16.3	05/07/19 10:43	B9E0360	JL	50	
1,2-Dibromo-3-chloropropane	< 46.3	46.3		ug/Kg dry	46.3	05/07/19 10:43	B9E0360	JL	50	
1,2-Dibromoethane	< 25.0	25.0		ug/Kg dry	14.2	05/07/19 10:43	B9E0360	JL	50	
1,2-Dichloroethane	< 25.0	25.0		ug/Kg dry	10.3	05/07/19 10:43	B9E0360	JL	50	
1,2-Dichloropropane	< 25.0	25.0		ug/Kg dry	19.0	05/07/19 10:43	B9E0360	JL	50	
1,3,5-Trimethylbenzene	< 25.0	25.0		ug/Kg dry	16.0	05/07/19 10:43	B9E0360	JL	50	
1-Butanol	< 484	484		ug/Kg dry	484	05/07/19 10:43	B9E0360	JL	50	
2-Butanone	< 120	120		ug/Kg dry	120	05/07/19 10:43	B9E0360	JL	50	
2-Hexanone	< 83.1	83.1		ug/Kg dry	83.1	05/07/19 10:43	B9E0360	JL	50	
4-Methyl-2-pentanone	< 56.0	56.0		ug/Kg dry	56.0	05/07/19 10:43	B9E0360	JL	50	
Acetone	< 206	206		ug/Kg dry	206	05/07/19 10:43	B9E0360	JL	50	
Acrylonitrile	< 59.4	59.4		ug/Kg dry	59.4	05/07/19 10:43	B9E0360	JL	50	
Benzene	< 25.0	25.0		ug/Kg dry	12.2	05/07/19 10:43	B9E0360	JL	50	
Bromodichloromethane	< 25.0	25.0		ug/Kg dry	18.1	05/07/19 10:43	B9E0360	JL	50	
Bromoform	< 25.0	25.0		ug/Kg dry	19.8	05/07/19 10:43	B9E0360	JL	50	
Carbon disulfide	< 25.0	25.0		ug/Kg dry	14.8	05/07/19 10:43	B9E0360	JL	50	
Carbon tetrachloride	< 25.0	25.0		ug/Kg dry	12.8	05/07/19 10:43	B9E0360	JL	50	
Chlorobenzene	< 25.0	25.0		ug/Kg dry	14.1	05/07/19 10:43	B9E0360	JL	50	
Chloroform	< 26.3	26.3		ug/Kg dry	26.3	05/07/19 10:43	B9E0360	JL	50	
cis-1,2-Dichloroethene	< 29.0	29.0		ug/Kg dry	29.0	05/07/19 10:43	B9E0360	JL	50	
Dibromochloromethane	< 25.0	25.0		ug/Kg dry	23.0	05/07/19 10:43	B9E0360	JL	50	
Ethylbenzene	< 25.0	25.0		ug/Kg dry	18.1	05/07/19 10:43	B9E0360	JL	50	
m,p-Xylene	< 89.9	89.9		ug/Kg dry	89.9	05/07/19 10:43	B9E0360	JL	50	
Methyl tert-butyl ether	< 25.0	25.0		ug/Kg dry	21.1	05/07/19 10:43	B9E0360	JL	50	
Methylene chloride	< 49.4	49.4		ug/Kg dry	49.4	05/07/19 10:43	B9E0360	JL	50	
o-Xylene	< 25.0	25.0		ug/Kg dry	12.5	05/07/19 10:43	B9E0360	JL	50	
Styrene	< 25.0	25.0		ug/Kg dry	18.1	05/07/19 10:43	B9E0360	JL	50	
<b>Tetrachloroethene</b>	<b>632</b>	25.0		ug/Kg dry	21.9	05/07/19 10:43	B9E0360	JL	50	
Toluene	< 25.0	25.0		ug/Kg dry	16.4	05/07/19 10:43	B9E0360	JL	50	
trans-1,2-Dichloroethene	< 39.9	39.9		ug/Kg dry	39.9	05/07/19 10:43	B9E0360	JL	50	
Trichloroethene	< 25.0	25.0		ug/Kg dry	14.6	05/07/19 10:43	B9E0360	JL	50	
Vinyl acetate	< 32.4	32.4		ug/Kg dry	32.4	05/07/19 10:43	B9E0360	JL	50	
Vinyl chloride	< 25.0	25.0		ug/Kg dry	20.0	05/07/19 10:43	B9E0360	JL	50	
Xylenes, Total	< 102	102		ug/Kg dry	102	05/07/19 10:43	B9E0360	JL	50	
1,2-Dichloroethene, Total	< 68.9	68.9		ug/Kg dry	68.9	05/07/19 10:43	B9E0360	JL	50	
<i>Surrogate: Dibromofluoromethane</i>					<i>Recovery: 116%</i>	<i>Limits: 78-137</i>	<i>05/07/19 10:43</i>	<i>B9E0360</i>	<i>JL</i>	<i>50</i>

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** GP-3 13'-14'  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 15:00  
**Matrix:** Soil  
**Lab ID:** 19E0242-09 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 (Continued)								
Surrogate: 1,2-Dichloroethane-d4				Recovery: 116%	Limits: 86-137	05/07/19 10:43	B9E0360	JL 50
Surrogate: Fluorobenzene				Recovery: 100%	Limits: 80-120	05/07/19 10:43	B9E0360	JL 50
Surrogate: Toluene-d8				Recovery: 91%	Limits: 73-112	05/07/19 10:43	B9E0360	JL 50
Surrogate: 4-Bromofluorobenzene				Recovery: 102%	Limits: 85-120	05/07/19 10:43	B9E0360	JL 50
Surrogate: 1,2-Dichlorobenzene-d4				Recovery: 114%	Limits: 85-128	05/07/19 10:43	B9E0360	JL 50

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW1  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:15  
**Matrix:** Water  
**Lab ID:** 19E0242-10

Analyses	Result	EMT		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Reporting Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030								
1,1,1-Trichloroethane	< 0.349	2.00	ug/L	0.349	05/09/19 21:30	B9E0358	JL	1
1,1,2,2-Tetrachloroethane	< 0.291	2.00	ug/L	0.291	05/09/19 21:30	B9E0358	JL	1
1,1,2-Trichloroethane	< 0.264	2.00	ug/L	0.264	05/09/19 21:30	B9E0358	JL	1
1,1-Dichloroethane	< 1.94	8.00	ug/L	1.94	05/09/19 21:30	B9E0358	JL	1
1,1-Dichloroethene	< 1.02	4.00	ug/L	1.02	05/09/19 21:30	B9E0358	JL	1
1,2,4-Trimethylbenzene	< 0.338	2.00	ug/L	0.338	05/09/19 21:30	B9E0358	JL	1
1,2-Dibromo-3-chloropropane	< 0.488	2.00	ug/L	0.488	05/09/19 21:30	B9E0358	JL	1
1,2-Dibromoethane	< 0.320	2.00	ug/L	0.320	05/09/19 21:30	B9E0358	JL	1
1,2-Dichloroethane	< 0.274	2.00	ug/L	0.274	05/09/19 21:30	B9E0358	JL	1
1,2-Dichloropropane	< 1.11	4.00	ug/L	1.11	05/09/19 21:30	B9E0358	JL	1
1,3,5-Trimethylbenzene	< 0.310	2.00	ug/L	0.310	05/09/19 21:30	B9E0358	JL	1
1-Butanol	< 6.69	90.0	ug/L	6.69	05/09/19 21:30	B9E0358	JL	1
2-Butanone	< 1.38	8.00	ug/L	1.38	05/09/19 21:30	B9E0358	JL	1
2-Hexanone	< 1.04	8.00	ug/L	1.04	05/09/19 21:30	B9E0358	JL	1
4-Methyl-2-pentanone	< 0.660	28.0	ug/L	0.660	05/09/19 21:30	B9E0358	JL	1
Acetone	< 3.75	28.0	ug/L	3.75	05/09/19 21:30	B9E0358	JL	1
Acrolein	< 6.63	20.0	ug/L	6.63	05/09/19 21:30	B9E0358	JL	1
Acrylonitrile	< 0.742	4.00	ug/L	0.742	05/09/19 21:30	B9E0358	JL	1
Benzene	< 0.370	2.00	ug/L	0.370	05/09/19 21:30	B9E0358	JL	1
Bromodichloromethane	< 0.310	2.00	ug/L	0.310	05/09/19 21:30	B9E0358	JL	1
Bromoform	< 0.254	2.00	ug/L	0.254	05/09/19 21:30	B9E0358	JL	1
Bromomethane	< 3.30	20.0	ug/L	3.30	05/09/19 21:30	B9E0358	JL	1
Carbon disulfide	< 0.259	2.00	ug/L	0.259	05/09/19 21:30	B9E0358	JL	1
Carbon tetrachloride	< 0.390	2.00	ug/L	0.390	05/09/19 21:30	B9E0358	JL	1
Chlorobenzene	< 0.358	2.00	ug/L	0.358	05/09/19 21:30	B9E0358	JL	1
Chloroethane	< 0.906	4.00	ug/L	0.906	05/09/19 21:30	B9E0358	JL	1
Chloroform	< 0.397	2.00	ug/L	0.397	05/09/19 21:30	B9E0358	JL	1
Chloromethane	< 2.23	8.00	ug/L	2.23	05/09/19 21:30	B9E0358	JL	1
cis-1,2-Dichloroethene	< 0.421	2.00	ug/L	0.421	05/09/19 21:30	B9E0358	JL	1
cis-1,3-Dichloropropene	< 0.278	2.00	ug/L	0.278	05/09/19 21:30	B9E0358	JL	1
Dibromochloromethane	< 0.492	2.00	ug/L	0.492	05/09/19 21:30	B9E0358	JL	1
Ethylbenzene	< 0.431	2.00	ug/L	0.431	05/09/19 21:30	B9E0358	JL	1
m,p-Xylene	< 0.310	4.00	ug/L	0.310	05/09/19 21:30	B9E0358	JL	1
Methyl tert-butyl ether	< 0.322	2.00	ug/L	0.322	05/09/19 21:30	B9E0358	JL	1
Methylene chloride	< 0.358	2.00	ug/L	0.358	05/09/19 21:30	B9E0358	JL	1
o-Xylene	< 0.349	2.00	ug/L	0.349	05/09/19 21:30	B9E0358	JL	1
Styrene	< 0.534	4.00	ug/L	0.534	05/09/19 21:30	B9E0358	JL	1
<b>Tetrachloroethene</b>	<b>1.92</b>	2.00	J ug/L	0.400	05/09/19 21:30	B9E0358	JL	1
Toluene	< 0.299	2.00	ug/L	0.299	05/09/19 21:30	B9E0358	JL	1
trans-1,2-Dichloroethene	< 0.433	2.00	ug/L	0.433	05/09/19 21:30	B9E0358	JL	1
trans-1,3-Dichloropropene	< 0.314	2.00	ug/L	0.314	05/09/19 21:30	B9E0358	JL	1
Trichloroethene	< 0.439	2.00	ug/L	0.439	05/09/19 21:30	B9E0358	JL	1
Vinyl acetate	< 1.01	8.00	ug/L	1.01	05/09/19 21:30	B9E0358	JL	1
Vinyl chloride	< 0.316	2.00	ug/L	0.316	05/09/19 21:30	B9E0358	JL	1
Xylenes, Total	< 0.660	6.00	ug/L	0.660	05/09/19 21:30	B9E0358	JL	1
1,3-Dichloropropene, Total	< 0.592	4.00	ug/L	0.592	05/09/19 21:30	B9E0358	JL	1

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW1  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 13:15  
**Matrix:** Water  
**Lab ID:** 19E0242-10 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030 (Continued)								
Surrogate: Dibromofluoromethane			Recovery: 108%	Limits: 80-135	05/09/19 21:30	B9E0358	JL	1
Surrogate: 1,2-Dichloroethane-d4			Recovery: 124%	Limits: 86-132	05/09/19 21:30	B9E0358	JL	1
Surrogate: Fluorobenzene			Recovery: 101%	Limits: 80-116	05/09/19 21:30	B9E0358	JL	1
Surrogate: Toluene-d8			Recovery: 90%	Limits: 73-120	05/09/19 21:30	B9E0358	JL	1
Surrogate: 4-Bromofluorobenzene			Recovery: 97%	Limits: 85-114	05/09/19 21:30	B9E0358	JL	1
Surrogate: 1,2-Dichlorobenzene-d4			Recovery: 119%	Limits: 88-136	05/09/19 21:30	B9E0358	JL	1

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW2  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:15  
**Matrix:** Water  
**Lab ID:** 19E0242-11

Analyses	Result	EMT		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Reporting Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS</b>								
Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030								
1,1,1-Trichloroethane	< 0.349	2.00	ug/L	0.349	05/09/19 22:04	B9E0358	JL	1
1,1,2,2-Tetrachloroethane	< 0.291	2.00	ug/L	0.291	05/09/19 22:04	B9E0358	JL	1
1,1,2-Trichloroethane	< 0.264	2.00	ug/L	0.264	05/09/19 22:04	B9E0358	JL	1
1,1-Dichloroethane	< 1.94	8.00	ug/L	1.94	05/09/19 22:04	B9E0358	JL	1
1,1-Dichloroethene	< 1.02	4.00	ug/L	1.02	05/09/19 22:04	B9E0358	JL	1
1,2,4-Trimethylbenzene	< 0.338	2.00	ug/L	0.338	05/09/19 22:04	B9E0358	JL	1
1,2-Dibromo-3-chloropropane	< 0.488	2.00	ug/L	0.488	05/09/19 22:04	B9E0358	JL	1
1,2-Dibromoethane	< 0.320	2.00	ug/L	0.320	05/09/19 22:04	B9E0358	JL	1
1,2-Dichloroethane	< 0.274	2.00	ug/L	0.274	05/09/19 22:04	B9E0358	JL	1
1,2-Dichloropropane	< 1.11	4.00	ug/L	1.11	05/09/19 22:04	B9E0358	JL	1
1,3,5-Trimethylbenzene	< 0.310	2.00	ug/L	0.310	05/09/19 22:04	B9E0358	JL	1
1-Butanol	< 6.69	90.0	ug/L	6.69	05/09/19 22:04	B9E0358	JL	1
2-Butanone	< 1.38	8.00	ug/L	1.38	05/09/19 22:04	B9E0358	JL	1
2-Hexanone	< 1.04	8.00	ug/L	1.04	05/09/19 22:04	B9E0358	JL	1
4-Methyl-2-pentanone	< 0.660	28.0	ug/L	0.660	05/09/19 22:04	B9E0358	JL	1
Acetone	< 3.75	28.0	ug/L	3.75	05/09/19 22:04	B9E0358	JL	1
Acrolein	< 6.63	20.0	ug/L	6.63	05/09/19 22:04	B9E0358	JL	1
Acrylonitrile	< 0.742	4.00	ug/L	0.742	05/09/19 22:04	B9E0358	JL	1
Benzene	< 0.370	2.00	ug/L	0.370	05/09/19 22:04	B9E0358	JL	1
Bromodichloromethane	< 0.310	2.00	ug/L	0.310	05/09/19 22:04	B9E0358	JL	1
Bromoform	< 0.254	2.00	ug/L	0.254	05/09/19 22:04	B9E0358	JL	1
Bromomethane	< 3.30	20.0	ug/L	3.30	05/09/19 22:04	B9E0358	JL	1
Carbon disulfide	< 0.259	2.00	ug/L	0.259	05/09/19 22:04	B9E0358	JL	1
Carbon tetrachloride	< 0.390	2.00	ug/L	0.390	05/09/19 22:04	B9E0358	JL	1
Chlorobenzene	< 0.358	2.00	ug/L	0.358	05/09/19 22:04	B9E0358	JL	1
Chloroethane	< 0.906	4.00	ug/L	0.906	05/09/19 22:04	B9E0358	JL	1
Chloroform	< 0.397	2.00	ug/L	0.397	05/09/19 22:04	B9E0358	JL	1
Chloromethane	< 2.23	8.00	ug/L	2.23	05/09/19 22:04	B9E0358	JL	1
cis-1,2-Dichloroethene	< 0.421	2.00	ug/L	0.421	05/09/19 22:04	B9E0358	JL	1
cis-1,3-Dichloropropene	< 0.278	2.00	ug/L	0.278	05/09/19 22:04	B9E0358	JL	1
Dibromochloromethane	< 0.492	2.00	ug/L	0.492	05/09/19 22:04	B9E0358	JL	1
Ethylbenzene	< 0.431	2.00	ug/L	0.431	05/09/19 22:04	B9E0358	JL	1
m,p-Xylene	< 0.310	4.00	ug/L	0.310	05/09/19 22:04	B9E0358	JL	1
Methyl tert-butyl ether	< 0.322	2.00	ug/L	0.322	05/09/19 22:04	B9E0358	JL	1
Methylene chloride	< 0.358	2.00	ug/L	0.358	05/09/19 22:04	B9E0358	JL	1
o-Xylene	< 0.349	2.00	ug/L	0.349	05/09/19 22:04	B9E0358	JL	1
Styrene	< 0.534	4.00	ug/L	0.534	05/09/19 22:04	B9E0358	JL	1
<b>Tetrachloroethene</b>	<b>52.8</b>	2.00	ug/L	0.400	05/09/19 22:04	B9E0358	JL	1
Toluene	< 0.299	2.00	ug/L	0.299	05/09/19 22:04	B9E0358	JL	1
trans-1,2-Dichloroethene	< 0.433	2.00	ug/L	0.433	05/09/19 22:04	B9E0358	JL	1
trans-1,3-Dichloropropene	< 0.314	2.00	ug/L	0.314	05/09/19 22:04	B9E0358	JL	1
Trichloroethene	< 0.439	2.00	ug/L	0.439	05/09/19 22:04	B9E0358	JL	1
Vinyl acetate	< 1.01	8.00	ug/L	1.01	05/09/19 22:04	B9E0358	JL	1
Vinyl chloride	< 0.316	2.00	ug/L	0.316	05/09/19 22:04	B9E0358	JL	1
Xylenes, Total	< 0.660	6.00	ug/L	0.660	05/09/19 22:04	B9E0358	JL	1
1,3-Dichloropropene, Total	< 0.592	4.00	ug/L	0.592	05/09/19 22:04	B9E0358	JL	1



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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW2  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 14:15  
**Matrix:** Water  
**Lab ID:** 19E0242-11 (Continued)

Analyses	EMT Reporting			MDL	Date/Time Analyzed	Batch	Analyst	DF
	Result	Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
<b>Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030 (Continued)</b>								
Surrogate: Dibromofluoromethane			Recovery: 119%	Limits: 80-135	05/09/19 22:04	B9E0358	JL	1
Surrogate: 1,2-Dichloroethane-d4			Recovery: 125%	Limits: 86-132	05/09/19 22:04	B9E0358	JL	1
Surrogate: Fluorobenzene			Recovery: 98%	Limits: 80-116	05/09/19 22:04	B9E0358	JL	1
Surrogate: Toluene-d8			Recovery: 88%	Limits: 73-120	05/09/19 22:04	B9E0358	JL	1
Surrogate: 4-Bromofluorobenzene			Recovery: 106%	Limits: 85-114	05/09/19 22:04	B9E0358	JL	1
Surrogate: 1,2-Dichlorobenzene-d4			Recovery: 118%	Limits: 88-136	05/09/19 22:04	B9E0358	JL	1

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW3  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 15:15  
**Matrix:** Water  
**Lab ID:** 19E0242-12

Analyses	Result	EMT		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Reporting Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS</b>								
<b>Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030</b>								
1,1,1-Trichloroethane	< 0.349	2.00	ug/L	0.349	05/09/19 22:37	B9E0358	JL	1
1,1,2,2-Tetrachloroethane	< 0.291	2.00	ug/L	0.291	05/09/19 22:37	B9E0358	JL	1
1,1,2-Trichloroethane	< 0.264	2.00	ug/L	0.264	05/09/19 22:37	B9E0358	JL	1
1,1-Dichloroethane	< 1.94	8.00	ug/L	1.94	05/09/19 22:37	B9E0358	JL	1
1,1-Dichloroethene	< 1.02	4.00	ug/L	1.02	05/09/19 22:37	B9E0358	JL	1
1,2,4-Trimethylbenzene	< 0.338	2.00	ug/L	0.338	05/09/19 22:37	B9E0358	JL	1
1,2-Dibromo-3-chloropropane	< 0.488	2.00	ug/L	0.488	05/09/19 22:37	B9E0358	JL	1
1,2-Dibromoethane	< 0.320	2.00	ug/L	0.320	05/09/19 22:37	B9E0358	JL	1
1,2-Dichloroethane	< 0.274	2.00	ug/L	0.274	05/09/19 22:37	B9E0358	JL	1
1,2-Dichloropropane	< 1.11	4.00	ug/L	1.11	05/09/19 22:37	B9E0358	JL	1
1,3,5-Trimethylbenzene	< 0.310	2.00	ug/L	0.310	05/09/19 22:37	B9E0358	JL	1
1-Butanol	< 6.69	90.0	ug/L	6.69	05/09/19 22:37	B9E0358	JL	1
2-Butanone	< 1.38	8.00	ug/L	1.38	05/09/19 22:37	B9E0358	JL	1
2-Hexanone	< 1.04	8.00	ug/L	1.04	05/09/19 22:37	B9E0358	JL	1
4-Methyl-2-pentanone	< 0.660	28.0	ug/L	0.660	05/09/19 22:37	B9E0358	JL	1
Acetone	< 3.75	28.0	ug/L	3.75	05/09/19 22:37	B9E0358	JL	1
Acrolein	< 6.63	20.0	ug/L	6.63	05/09/19 22:37	B9E0358	JL	1
Acrylonitrile	< 0.742	4.00	ug/L	0.742	05/09/19 22:37	B9E0358	JL	1
Benzene	< 0.370	2.00	ug/L	0.370	05/09/19 22:37	B9E0358	JL	1
Bromodichloromethane	< 0.310	2.00	ug/L	0.310	05/09/19 22:37	B9E0358	JL	1
Bromoform	< 0.254	2.00	ug/L	0.254	05/09/19 22:37	B9E0358	JL	1
Bromomethane	< 3.30	20.0	ug/L	3.30	05/09/19 22:37	B9E0358	JL	1
Carbon disulfide	< 0.259	2.00	ug/L	0.259	05/09/19 22:37	B9E0358	JL	1
Carbon tetrachloride	< 0.390	2.00	ug/L	0.390	05/09/19 22:37	B9E0358	JL	1
Chlorobenzene	< 0.358	2.00	ug/L	0.358	05/09/19 22:37	B9E0358	JL	1
Chloroethane	< 0.906	4.00	ug/L	0.906	05/09/19 22:37	B9E0358	JL	1
Chloroform	< 0.397	2.00	ug/L	0.397	05/09/19 22:37	B9E0358	JL	1
Chloromethane	< 2.23	8.00	ug/L	2.23	05/09/19 22:37	B9E0358	JL	1
cis-1,2-Dichloroethene	< 0.421	2.00	ug/L	0.421	05/09/19 22:37	B9E0358	JL	1
cis-1,3-Dichloropropene	< 0.278	2.00	ug/L	0.278	05/09/19 22:37	B9E0358	JL	1
Dibromochloromethane	< 0.492	2.00	ug/L	0.492	05/09/19 22:37	B9E0358	JL	1
Ethylbenzene	< 0.431	2.00	ug/L	0.431	05/09/19 22:37	B9E0358	JL	1
m,p-Xylene	< 0.310	4.00	ug/L	0.310	05/09/19 22:37	B9E0358	JL	1
Methyl tert-butyl ether	< 0.322	2.00	ug/L	0.322	05/09/19 22:37	B9E0358	JL	1
Methylene chloride	< 0.358	2.00	ug/L	0.358	05/09/19 22:37	B9E0358	JL	1
o-Xylene	< 0.349	2.00	ug/L	0.349	05/09/19 22:37	B9E0358	JL	1
Styrene	< 0.534	4.00	ug/L	0.534	05/09/19 22:37	B9E0358	JL	1
Tetrachloroethene	< 0.400	2.00	ug/L	0.400	05/09/19 22:37	B9E0358	JL	1
Toluene	< 0.299	2.00	ug/L	0.299	05/09/19 22:37	B9E0358	JL	1
trans-1,2-Dichloroethene	< 0.433	2.00	ug/L	0.433	05/09/19 22:37	B9E0358	JL	1
trans-1,3-Dichloropropene	< 0.314	2.00	ug/L	0.314	05/09/19 22:37	B9E0358	JL	1
Trichloroethene	< 0.439	2.00	ug/L	0.439	05/09/19 22:37	B9E0358	JL	1
Vinyl acetate	< 1.01	8.00	ug/L	1.01	05/09/19 22:37	B9E0358	JL	1
Vinyl chloride	< 0.316	2.00	ug/L	0.316	05/09/19 22:37	B9E0358	JL	1
Xylenes, Total	< 0.660	6.00	ug/L	0.660	05/09/19 22:37	B9E0358	JL	1
1,3-Dichloropropene, Total	< 0.592	4.00	ug/L	0.592	05/09/19 22:37	B9E0358	JL	1

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

## Client Sample Results

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Client Sample ID:** TW3  
**Report Date:** 05/13/2019  
**Collection Date:** 05/01/2019 15:15  
**Matrix:** Water  
**Lab ID:** 19E0242-12 (Continued)

Analyses	Result	EMT Reporting		MDL	Date/Time Analyzed	Batch	Analyst	DF
		Limit	Qual Units					
<b>Volatile Organic Compounds by GC/MS (Continued)</b>								
<b>Method: SW-846 8260B/WDNR: PUBL-FW-140 / SW5030 (Continued)</b>								
Surrogate: Dibromofluoromethane			Recovery: 116%	Limits: 80-135	05/09/19 22:37	B9E0358	JL	1
Surrogate: 1,2-Dichloroethane-d4			Recovery: 119%	Limits: 86-132	05/09/19 22:37	B9E0358	JL	1
Surrogate: Fluorobenzene			Recovery: 103%	Limits: 80-116	05/09/19 22:37	B9E0358	JL	1
Surrogate: Toluene-d8			Recovery: 88%	Limits: 73-120	05/09/19 22:37	B9E0358	JL	1
Surrogate: 4-Bromofluorobenzene			Recovery: 100%	Limits: 85-114	05/09/19 22:37	B9E0358	JL	1
Surrogate: 1,2-Dichlorobenzene-d4			Recovery: 120%	Limits: 88-136	05/09/19 22:37	B9E0358	JL	1

## Dates Report

**Client:** United Engineering Consultants, Inc.

**Report Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Work Order:** 19E0242

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
19E0242-01	GP-1 2'-3'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 15:52	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 06:13	B9E0360	S9E0185
19E0242-02	GP-1 5'-6'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 15:54	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 06:47	B9E0360	S9E0185
19E0242-03	GP-1 13'-14'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 15:56	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 07:21	B9E0360	S9E0185
19E0242-04	GP-2 3'-4'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 15:58	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 07:54	B9E0360	S9E0185
19E0242-05	GP-2 7'-8'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 16:00	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 08:28	B9E0360	S9E0185
19E0242-06	GP-2 15'-16'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 16:02	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 09:02	B9E0360	S9E0185
19E0242-07	GP-3 3'-4'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 16:04	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 09:36	B9E0360	S9E0185
19E0242-08	GP-3 6'-7'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 16:06	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 10:09	B9E0360	S9E0185
19E0242-09	GP-3 13'-14'	05/01/19	Soil	Total Solids / Percent Moisture		05/07/19 15:50	05/07/19 16:08	B9E0235	
				Volatile Organic Compounds (WDNR) by GC/MS		05/06/19 11:59	05/07/19 10:43	B9E0360	S9E0185
19E0242-10	TW1	05/01/19	Water	Volatile Organic Compounds (WDNR) by GC/MS		05/09/19 11:37	05/09/19 21:30	B9E0358	S9E0183
19E0242-11	TW2	05/01/19	Water	Volatile Organic Compounds (WDNR) by GC/MS		05/09/19 11:37	05/09/19 22:04		
19E0242-12	TW3	05/01/19	Water	Volatile Organic Compounds (WDNR) by GC/MS		05/09/19 11:37	05/09/19 22:37		

### Quality Control

**Client:** United Engineering Consultants, Inc.

**Report Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Matrix:** Solid

**Work Order:** 19E0242

### Wet Chemistry

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

**Batch: B9E0235**
**Blank (B9E0235-BLK1)**
*Prepared: 05/07/2019 15:50 Analyzed: 05/07/2019 16:20*

Total Solids	< 0.100	0.100	%								1
--------------	---------	-------	---	--	--	--	--	--	--	--	---

**LCS (B9E0235-BS1)**
*Prepared: 05/07/2019 15:50 Analyzed: 05/07/2019 16:22*

Total Solids	0.202	0.100	%	0.2006		101	86.3-105				1
--------------	-------	-------	---	--------	--	-----	----------	--	--	--	---

**Duplicate (B9E0235-DUP1)**
**Source: 19E0242-05**
*Prepared: 05/07/2019 15:50 Analyzed: 05/07/2019 16:24*

Total Solids	84.0	0.100	%		85.1			1.23	5		1
--------------	------	-------	---	--	------	--	--	------	---	--	---

**Duplicate (B9E0235-DUP2)**
**Source: 19E0265-01**
*Prepared: 05/07/2019 15:50 Analyzed: 05/07/2019 16:26*

Total Solids	85.5	0.100	%		84.1			1.65	5		1
--------------	------	-------	---	--	------	--	--	------	---	--	---

### Quality Control

(Continued)

Client: United Engineering Consultants, Inc.

Report Date: 05/13/2019

Project: UEC Analysis  
19006

Matrix: Solid

Work Order: 19E0242

### Volatile Organic Compounds by GC/MS

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

**Batch: B9E0360**
**Blank (B9E0360-BLK1)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 05:40

1,1,1-Trichloroethane	< 200	200	ug/Kg wet								50
1,1,2,2-Tetrachloroethane	< 200	200	ug/Kg wet								50
1,1,2-Trichloroethane	< 200	200	ug/Kg wet								50
1,1-Dichloroethane	< 200	200	ug/Kg wet								50
1,1-Dichloroethene	< 200	200	ug/Kg wet								50
1,2,4-Trimethylbenzene	< 100	100	ug/Kg wet								50
1,2-Dibromo-3-chloropropane	< 200	200	ug/Kg wet								50
1,2-Dibromoethane	< 100	100	ug/Kg wet								50
1,2-Dichloroethane	< 50.0	50.0	ug/Kg wet								50
1,2-Dichloropropane	< 100	100	ug/Kg wet								50
1,3,5-Trimethylbenzene	< 100	100	ug/Kg wet								50
1-Butanol	< 3600	3600	ug/Kg wet								50
2-Butanone	< 700	700	ug/Kg wet								50
2-Hexanone	< 350	350	ug/Kg wet								50
4-Methyl-2-pentanone	< 350	350	ug/Kg wet								50
Acetone	< 1750	1750	ug/Kg wet								50
Acrylonitrile	< 400	400	ug/Kg wet								50
Benzene	< 100	100	ug/Kg wet								50
Bromodichloromethane	< 100	100	ug/Kg wet								50
Bromoform	< 100	100	ug/Kg wet								50
Carbon disulfide	< 100	100	ug/Kg wet								50
Carbon tetrachloride	< 100	100	ug/Kg wet								50
Chlorobenzene	< 100	100	ug/Kg wet								50
Chloroform	< 100	100	ug/Kg wet								50
cis-1,2-Dichloroethene	< 200	200	ug/Kg wet								50
Dibromochloromethane	< 200	200	ug/Kg wet								50
Ethylbenzene	< 100	100	ug/Kg wet								50
m,p-Xylene	< 400	400	ug/Kg wet								50
Methyl tert-butyl ether	< 100	100	ug/Kg wet								50
Methylene chloride	< 200	200	ug/Kg wet								50
o-Xylene	< 100	100	ug/Kg wet								50
Styrene	< 100	100	ug/Kg wet								50
Tetrachloroethene	< 100	100	ug/Kg wet								50
Toluene	< 100	100	ug/Kg wet								50
trans-1,2-Dichloroethene	< 200	200	ug/Kg wet								50
Trichloroethene	< 100	100	ug/Kg wet								50
Vinyl acetate	< 200	200	ug/Kg wet								50
Vinyl chloride	< 100	100	ug/Kg wet								50
Xylenes, Total	< 500	500	ug/Kg wet								50
1,2-Dichloroethene, Total	< 400	400	ug/Kg wet								50
Surrogate: Dibromofluoromethane	21.6		ug/Kg	20.00		108	78-137				50
Surrogate: 1,2-Dichloroethane-d4	23.8		ug/Kg	20.00		119	86-137				50



### Quality Control

(Continued)

Client: United Engineering Consultants, Inc.

Report Date: 05/13/2019

Project: UEC Analysis  
19006

Matrix: Solid

Work Order: 19E0242

### Volatile Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0360 (Continued)**
**Blank (B9E0360-BLK1) (Continued)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 05:40

Surrogate: Fluorobenzene	19.8		ug/Kg	20.00		99	80-120				50
Surrogate: Toluene-d8	18.6		ug/Kg	20.00		93	73-112				50
Surrogate: 4-Bromofluorobenzene	10.2		ug/Kg	10.00		102	85-120				50
Surrogate: 1,2-Dichlorobenzene-d4	21.4		ug/Kg	20.00		107	85-128				50

**LCS (B9E0360-BS1)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 03:59

1,1,1-Trichloroethane	891	200	ug/Kg wet	1000		89	55-145				50
1,1,1,2,2-Tetrachloroethane	1040	200	ug/Kg wet	1000		104	40-145				50
1,1,2-Trichloroethane	1050	200	ug/Kg wet	1000		105	50-140				50
1,1-Dichloroethane	982	200	ug/Kg wet	1000		98	65-135				50
1,1-Dichloroethene	964	200	ug/Kg wet	1000		96	55-150				50
1,2,4-Trimethylbenzene	862	100	ug/Kg wet	1000		86	55-145				50
1,2-Dibromo-3-chloropropane	1120	200	ug/Kg wet	1000		112	25-150				50
1,2-Dibromoethane	986	100	ug/Kg wet	1000		99	60-135				50
1,2-Dichloroethane	1040	50.0	ug/Kg wet	1000		104	60-145				50
1,2-Dichloropropane	984	100	ug/Kg wet	1000		98	65-125				50
1,3,5-Trimethylbenzene	828	100	ug/Kg wet	1000		83	55-145				50
1-Butanol	10600	3600	ug/Kg wet	10000		106	70-130				50
2-Butanone	4050	700	ug/Kg wet	3500		116	10-180				50
2-Hexanone	3680	350	ug/Kg wet	3500		105	30-160				50
4-Methyl-2-pentanone	3830	350	ug/Kg wet	3500		109	30-165				50
Acetone	5090	1750	ug/Kg wet	3500		145	10-180				50
Acrylonitrile	1030	400	ug/Kg wet	1000		103	70-130				50
Benzene	948	100	ug/Kg wet	1000		95	65-135				50
Bromodichloromethane	992	100	ug/Kg wet	1000		99	60-135				50
Bromoform	1000	100	ug/Kg wet	1000		100	45-150				50
Carbon disulfide	880	100	ug/Kg wet	1000		88	30-180				50
Carbon tetrachloride	866	100	ug/Kg wet	1000		87	55-145				50
Chlorobenzene	880	100	ug/Kg wet	1000		88	65-130				50
Chloroform	970	100	ug/Kg wet	1000		97	65-135				50
cis-1,2-Dichloroethene	926	200	ug/Kg wet	1000		93	55-135				50
Dibromochloromethane	972	200	ug/Kg wet	1000		97	55-140				50
Ethylbenzene	802	100	ug/Kg wet	1000		80	65-135				50
m,p-Xylene	1640	400	ug/Kg wet	2000		82	70-135				50
Methyl tert-butyl ether	1020	100	ug/Kg wet	1000		102	70-130				50
Methylene chloride	1050	200	ug/Kg wet	1000		105	40-155				50
o-Xylene	840	100	ug/Kg wet	1000		84	70-135				50
Styrene	860	100	ug/Kg wet	1000		86	65-135				50
Tetrachloroethene	1160	100	ug/Kg wet	1000		116	55-150				50
Toluene	874	100	ug/Kg wet	1000		87	60-135				50
trans-1,2-Dichloroethene	957	200	ug/Kg wet	1000		96	55-145				50
Trichloroethene	934	100	ug/Kg wet	1000		93	70-130				50

## Quality Control

(Continued)

**Client:** United Engineering Consultants, Inc.  
**Project:** UEC Analysis  
 19006  
**Work Order:** 19E0242

**Report Date:** 05/13/2019  
**Matrix:** Solid

### Volatile Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0360 (Continued)**
**LCS (B9E0360-BS1) (Continued)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 03:59

Vinyl acetate	772	200	ug/Kg wet	1000		77	50-150				50
Vinyl chloride	988	100	ug/Kg wet	1000		99	45-140				50
Xylenes, Total	2480	500	ug/Kg wet	3000		82	70-135				50
1,2-Dichloroethene, Total	1880	400	ug/Kg wet	2000		94	55-135				50
<hr style="border-top: 1px dashed black;"/>											
Surrogate: Dibromofluoromethane	21.8		ug/Kg	20.00		109	78-137				50
Surrogate: 1,2-Dichloroethane-d4	22.5		ug/Kg	20.00		112	86-137				50
Surrogate: Fluorobenzene	20.3		ug/Kg	20.00		101	80-120				50
Surrogate: Toluene-d8	20.0		ug/Kg	20.00		100	73-112				50
Surrogate: 4-Bromofluorobenzene	10.4		ug/Kg	10.00		104	85-120				50
Surrogate: 1,2-Dichlorobenzene-d4	22.5		ug/Kg	20.00		112	85-128				50

**LCS Dup (B9E0360-BSD1)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 04:32

1,1,1-Trichloroethane	886	200	ug/Kg wet	1000		89	55-145	0.6	20		50
1,1,2,2-Tetrachloroethane	1060	200	ug/Kg wet	1000		106	40-145	2	20		50
1,1,2-Trichloroethane	1050	200	ug/Kg wet	1000		105	50-140	0.7	20		50
1,1-Dichloroethane	962	200	ug/Kg wet	1000		96	65-135	2	20		50
1,1-Dichloroethene	954	200	ug/Kg wet	1000		95	55-150	1	20		50
1,2,4-Trimethylbenzene	846	100	ug/Kg wet	1000		85	55-145	2	20		50
1,2-Dibromo-3-chloropropane	1100	200	ug/Kg wet	1000		110	25-150	2	20		50
1,2-Dibromoethane	972	100	ug/Kg wet	1000		97	60-135	1	20		50
1,2-Dichloroethane	1030	50.0	ug/Kg wet	1000		103	60-145	2	20		50
1,2-Dichloropropane	934	100	ug/Kg wet	1000		93	65-125	5	20		50
1,3,5-Trimethylbenzene	850	100	ug/Kg wet	1000		85	55-145	3	20		50
1-Butanol	10700	3600	ug/Kg wet	10000		107	70-130	1	20		50
2-Butanone	3850	700	ug/Kg wet	3500		110	10-180	5	20		50
2-Hexanone	3780	350	ug/Kg wet	3500		108	30-160	3	20		50
4-Methyl-2-pentanone	3530	350	ug/Kg wet	3500		101	30-165	8	20		50
Acetone	5280	1750	ug/Kg wet	3500		151	10-180	4	20		50
Acrylonitrile	972	400	ug/Kg wet	1000		97	70-130	6	20		50
Benzene	932	100	ug/Kg wet	1000		93	65-135	2	20		50
Bromodichloromethane	955	100	ug/Kg wet	1000		96	60-135	4	20		50
Bromoform	1010	100	ug/Kg wet	1000		101	45-150	1	20		50
Carbon disulfide	875	100	ug/Kg wet	1000		88	30-180	0.6	20		50
Carbon tetrachloride	904	100	ug/Kg wet	1000		90	55-145	4	20		50
Chlorobenzene	903	100	ug/Kg wet	1000		90	65-130	3	20		50
Chloroform	950	100	ug/Kg wet	1000		95	65-135	2	20		50
cis-1,2-Dichloroethene	920	200	ug/Kg wet	1000		92	55-135	0.7	20		50
Dibromochloromethane	963	200	ug/Kg wet	1000		96	55-140	0.9	20		50
Ethylbenzene	822	100	ug/Kg wet	1000		82	65-135	2	20		50
m,p-Xylene	1640	400	ug/Kg wet	2000		82	70-135	0.03	20		50
Methyl tert-butyl ether	1000	100	ug/Kg wet	1000		100	70-130	2	20		50
Methylene chloride	1030	200	ug/Kg wet	1000		103	40-155	1	20		50

### Quality Control

(Continued)

**Client:** United Engineering Consultants, Inc.

**Report Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Matrix:** Solid

**Work Order:** 19E0242

### Volatiles Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0360 (Continued)**
**LCS Dup (B9E0360-BSD1) (Continued)**

Prepared: 05/06/2019 11:59 Analyzed: 05/07/2019 04:32

o-Xylene	822	100	ug/Kg wet	1000		82	70-135	2	20		50
Styrene	817	100	ug/Kg wet	1000		82	65-135	5	20		50
Tetrachloroethene	1120	100	ug/Kg wet	1000		112	55-150	4	20		50
Toluene	880	100	ug/Kg wet	1000		88	60-135	0.7	20		50
trans-1,2-Dichloroethene	916	200	ug/Kg wet	1000		92	55-145	4	20		50
Trichloroethene	936	100	ug/Kg wet	1000		94	70-130	0.2	20		50
Vinyl acetate	736	200	ug/Kg wet	1000		74	50-150	5	20		50
Vinyl chloride	958	100	ug/Kg wet	1000		96	45-140	3	20		50
Xylenes, Total	2460	500	ug/Kg wet	3000		82	70-135	0.8	20		50
1,2-Dichloroethene, Total	1840	400	ug/Kg wet	2000		92	55-135	3	20		50
<hr/>											
Surrogate: Dibromofluoromethane	21.4		ug/Kg	20.00		107	78-137				50
Surrogate: 1,2-Dichloroethane-d4	22.9		ug/Kg	20.00		115	86-137				50
Surrogate: Fluorobenzene	20.3		ug/Kg	20.00		102	80-120				50
Surrogate: Toluene-d8	20.3		ug/Kg	20.00		102	73-112				50
Surrogate: 4-Bromofluorobenzene	10.3		ug/Kg	10.00		103	85-120				50
Surrogate: 1,2-Dichlorobenzene-d4	22.7		ug/Kg	20.00		114	85-128				50

### Quality Control

(Continued)

**Client:** United Engineering Consultants, Inc.

**Report Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Matrix:** Water

**Work Order:** 19E0242

### Volatile Organic Compounds by GC/MS

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

**Batch: B9E0358 - SW5030**
**Blank (B9E0358-BLK1)**

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 17:01

1,1,1-Trichloroethane	< 0.349	2.00	ug/L								1
1,1,2,2-Tetrachloroethane	< 0.291	2.00	ug/L								1
1,1,2-Trichloroethane	< 0.264	2.00	ug/L								1
1,1-Dichloroethane	< 1.94	8.00	ug/L								1
1,1-Dichloroethene	< 1.02	4.00	ug/L								1
1,2,4-Trimethylbenzene	< 0.338	2.00	ug/L								1
1,2-Dibromo-3-chloropropane	< 0.488	2.00	ug/L								1
1,2-Dibromoethane	< 0.320	2.00	ug/L								1
1,2-Dichloroethane	< 0.274	2.00	ug/L								1
1,2-Dichloropropane	< 1.11	4.00	ug/L								1
1,3,5-Trimethylbenzene	< 0.310	2.00	ug/L								1
1-Butanol	< 6.69	90.0	ug/L								1
2-Butanone	< 1.38	8.00	ug/L								1
2-Hexanone	< 1.04	8.00	ug/L								1
4-Methyl-2-pentanone	< 0.660	28.0	ug/L								1
Acetone	< 3.75	28.0	ug/L								1
Acrolein	< 6.63	20.0	ug/L								1
Acrylonitrile	< 0.742	4.00	ug/L								1
Benzene	< 0.370	2.00	ug/L								1
Bromodichloromethane	< 0.310	2.00	ug/L								1
Bromoform	< 0.254	2.00	ug/L								1
Bromomethane	< 3.30	20.0	ug/L								1
Carbon disulfide	< 0.259	2.00	ug/L								1
Carbon tetrachloride	< 0.390	2.00	ug/L								1
Chlorobenzene	< 0.358	2.00	ug/L								1
Chloroethane	< 0.906	4.00	ug/L								1
Chloroform	< 0.397	2.00	ug/L								1
Chloromethane	< 2.23	8.00	ug/L								1
cis-1,2-Dichloroethene	< 0.421	2.00	ug/L								1
cis-1,3-Dichloropropene	< 0.278	2.00	ug/L								1
Dibromochloromethane	< 0.492	2.00	ug/L								1
Ethylbenzene	< 0.431	2.00	ug/L								1
m,p-Xylene	< 0.310	4.00	ug/L								1
Methyl tert-butyl ether	< 0.322	2.00	ug/L								1
Methylene chloride	< 0.358	2.00	ug/L								1
o-Xylene	< 0.349	2.00	ug/L								1
Styrene	< 0.534	4.00	ug/L								1
Tetrachloroethene	< 0.400	2.00	ug/L								1
Toluene	< 0.299	2.00	ug/L								1
trans-1,2-Dichloroethene	< 0.433	2.00	ug/L								1
trans-1,3-Dichloropropene	< 0.314	2.00	ug/L								1
Trichloroethene	< 0.439	2.00	ug/L								1

### Quality Control

(Continued)

Client: United Engineering Consultants, Inc.

Report Date: 05/13/2019

Project: UEC Analysis  
19006

Matrix: Water

Work Order: 19E0242

### Volatile Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0358 - SW5030 (Continued)**

Blank (B9E0358-BLK1) (Continued)

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 17:01

Vinyl acetate	< 1.01	8.00	ug/L								1
Vinyl chloride	< 0.316	2.00	ug/L								1
Xylenes, Total	< 0.660	6.00	ug/L								1
1,3-Dichloropropene, Total	< 0.592	4.00	ug/L								1
<hr/>											
Surrogate: Dibromofluoromethane	23.0		ug/L	20.00		115	80-135				1
Surrogate: 1,2-Dichloroethane-d4	22.9		ug/L	20.00		114	86-132				1
Surrogate: Fluorobenzene	20.4		ug/L	20.00		102	80-116				1
Surrogate: Toluene-d8	18.3		ug/L	20.00		92	73-120				1
Surrogate: 4-Bromofluorobenzene	9.40		ug/L	10.00		94	85-114				1
Surrogate: 1,2-Dichlorobenzene-d4	23.4		ug/L	20.00		117	88-136				1

**LCS (B9E0358-BS1)**

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 15:20

1,1,1-Trichloroethane	16.7	2.00	ug/L	20.00		83	74-131				1
1,1,2,2-Tetrachloroethane	22.8	2.00	ug/L	20.00		114	71-121				1
1,1,2-Trichloroethane	22.3	2.00	ug/L	20.00		112	80-119				1
1,1-Dichloroethane	17.5	8.00	ug/L	20.00		87	77-125				1
1,1-Dichloroethene	18.1	4.00	ug/L	20.00		91	71-131				1
1,2,4-Trimethylbenzene	18.8	2.00	ug/L	20.00		94	76-124				1
1,2-Dibromo-3-chloropropane	21.9	2.00	ug/L	20.00		110	62-128				1
1,2-Dibromoethane	21.6	2.00	ug/L	20.00		108	77-121				1
1,2-Dichloroethane	18.3	2.00	ug/L	20.00		91	73-128				1
1,2-Dichloropropane	23.4	4.00	ug/L	20.00		117	78-122				1
1,3,5-Trimethylbenzene	18.7	2.00	ug/L	20.00		94	75-124				1
1-Butanol	239	90.0	ug/L	200.0		119	70-130				1
2-Butanone	63.3	8.00	ug/L	70.00		90	56-143				1
2-Hexanone	78.4	8.00	ug/L	70.00		112	57-139				1
4-Methyl-2-pentanone	80.4	28.0	ug/L	70.00		115	67-130				1
Acetone	83.5	28.0	ug/L	70.00		119	39-160				1
Acrolein	53.1	20.0	ug/L	50.00		106	39-155				1
Acrylonitrile	21.2	4.00	ug/L	20.00		106	63-135				1
Benzene	21.8	2.00	ug/L	20.00		109	79-120				1
Bromodichloromethane	23.3	2.00	ug/L	20.00		116	79-125				1
Bromoform	23.6	2.00	ug/L	20.00		118	66-130				1
Bromomethane	17.1	20.0	ug/L	20.00		86	53-141			J	1
Carbon disulfide	18.0	2.00	ug/L	20.00		90	64-133				1
Carbon tetrachloride	22.0	2.00	ug/L	20.00		110	72-136				1
Chlorobenzene	20.1	2.00	ug/L	20.00		100	82-118				1
Chloroethane	20.2	4.00	ug/L	20.00		101	60-138				1
Chloroform	17.9	2.00	ug/L	20.00		89	79-124				1
Chloromethane	16.0	8.00	ug/L	20.00		80	50-139				1
cis-1,2-Dichloroethene	16.8	2.00	ug/L	20.00		84	78-123				1
cis-1,3-Dichloropropene	21.4	2.00	ug/L	20.00		107	75-124				1

### Quality Control

(Continued)

Client: United Engineering Consultants, Inc.

Report Date: 05/13/2019

Project: UEC Analysis  
19006

Matrix: Water

Work Order: 19E0242

### Volatile Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0358 - SW5030 (Continued)**
**LCS (B9E0358-BS1) (Continued)**

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 15:20

Dibromochloromethane	23.1	2.00	ug/L	20.00		115	74-126				1
Ethylbenzene	17.6	2.00	ug/L	20.00		88	79-121				1
m,p-Xylene	36.7	4.00	ug/L	40.00		92	80-136				1
Methyl tert-butyl ether	17.4	2.00	ug/L	20.00		87	71-124				1
Methylene chloride	18.6	2.00	ug/L	20.00		93	74-124				1
o-Xylene	16.9	2.00	ug/L	20.00		85	78-122				1
Styrene	18.0	4.00	ug/L	20.00		90	78-123				1
Tetrachloroethene	21.3	2.00	ug/L	20.00		106	74-129				1
Toluene	19.6	2.00	ug/L	20.00		98	80-133				1
trans-1,2-Dichloroethene	17.2	2.00	ug/L	20.00		86	75-124				1
trans-1,3-Dichloropropene	22.4	2.00	ug/L	20.00		112	73-127				1
Trichloroethene	21.3	2.00	ug/L	20.00		106	79-123				1
Vinyl acetate	18.5	8.00	ug/L	20.00		92	54-146				1
Vinyl chloride	19.5	2.00	ug/L	20.00		98	58-137				1
Xylenes, Total	53.7	6.00	ug/L	60.00		89	79-121				1
1,3-Dichloropropene, Total	43.8	4.00	ug/L	40.00		110	77-123				1
<hr/>											
Surrogate: Dibromofluoromethane	17.5		ug/L	20.00		87	80-135				1
Surrogate: 1,2-Dichloroethane-d4	19.1		ug/L	20.00		96	86-132				1
Surrogate: Fluorobenzene	20.8		ug/L	20.00		104	80-116				1
Surrogate: Toluene-d8	20.6		ug/L	20.00		103	73-120				1
Surrogate: 4-Bromofluorobenzene	9.77		ug/L	10.00		98	85-114				1
Surrogate: 1,2-Dichlorobenzene-d4	22.3		ug/L	20.00		112	88-136				1

**LCS Dup (B9E0358-BSD1)**

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 15:53

1,1,1-Trichloroethane	19.3	2.00	ug/L	20.00		96	74-131	15	20		1
1,1,2,2-Tetrachloroethane	21.4	2.00	ug/L	20.00		107	71-121	7	20		1
1,1,2-Trichloroethane	23.4	2.00	ug/L	20.00		117	80-119	5	20		1
1,1-Dichloroethane	19.2	8.00	ug/L	20.00		96	77-125	10	20		1
1,1-Dichloroethene	21.3	4.00	ug/L	20.00		107	71-131	16	20		1
1,2,4-Trimethylbenzene	17.2	2.00	ug/L	20.00		86	76-124	9	20		1
1,2-Dibromo-3-chloropropane	21.6	2.00	ug/L	20.00		108	62-128	1	20		1
1,2-Dibromoethane	20.7	2.00	ug/L	20.00		104	77-121	4	20		1
1,2-Dichloroethane	19.9	2.00	ug/L	20.00		100	73-128	9	20		1
1,2-Dichloropropane	23.2	4.00	ug/L	20.00		116	78-122	0.9	20		1
1,3,5-Trimethylbenzene	17.3	2.00	ug/L	20.00		86	75-124	8	20		1
1-Butanol	260	90.0	ug/L	200.0		130	70-130	9	20		1
2-Butanone	69.6	8.00	ug/L	70.00		99	56-143	10	20		1
2-Hexanone	81.8	8.00	ug/L	70.00		117	57-139	4	20		1
4-Methyl-2-pentanone	81.2	28.0	ug/L	70.00		116	67-130	1	20		1
Acetone	83.9	28.0	ug/L	70.00		120	39-160	0.5	20		1
Acrolein	60.4	20.0	ug/L	50.00		121	39-155	13	20		1
Acrylonitrile	20.6	4.00	ug/L	20.00		103	63-135	3	20		1



### Quality Control

(Continued)

**Client:** United Engineering Consultants, Inc.

**Report Date:** 05/13/2019

**Project:** UEC Analysis  
19006

**Matrix:** Water

**Work Order:** 19E0242

### Volatile Organic Compounds by GC/MS

(Continued)

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

**Batch: B9E0358 - SW5030 (Continued)**
**LCS Dup (B9E0358-BSD1) (Continued)**

Prepared: 05/09/2019 13:37 Analyzed: 05/09/2019 15:53

Benzene	22.5	2.00	ug/L	20.00		112	79-120	3	20		1
Bromodichloromethane	23.8	2.00	ug/L	20.00		119	79-125	2	20		1
Bromoform	24.2	2.00	ug/L	20.00		121	66-130	3	20		1
Bromomethane	17.9	20.0	ug/L	20.00		90	53-141	5	20	J	1
Carbon disulfide	20.1	2.00	ug/L	20.00		100	64-133	11	20		1
Carbon tetrachloride	23.0	2.00	ug/L	20.00		115	72-136	5	20		1
Chlorobenzene	20.5	2.00	ug/L	20.00		103	82-118	2	20		1
Chloroethane	21.9	4.00	ug/L	20.00		110	60-138	8	20		1
Chloroform	19.1	2.00	ug/L	20.00		95	79-124	6	20		1
Chloromethane	15.6	8.00	ug/L	20.00		78	50-139	2	20		1
cis-1,2-Dichloroethene	18.3	2.00	ug/L	20.00		91	78-123	9	20		1
cis-1,3-Dichloropropene	21.9	2.00	ug/L	20.00		109	75-124	2	20		1
Dibromochloromethane	23.5	2.00	ug/L	20.00		118	74-126	2	20		1
Ethylbenzene	18.4	2.00	ug/L	20.00		92	79-121	4	20		1
m,p-Xylene	38.6	4.00	ug/L	40.00		97	80-136	5	20		1
Methyl tert-butyl ether	19.4	2.00	ug/L	20.00		97	71-124	11	20		1
Methylene chloride	20.1	2.00	ug/L	20.00		100	74-124	7	20		1
o-Xylene	16.2	2.00	ug/L	20.00		81	78-122	4	20		1
Styrene	18.7	4.00	ug/L	20.00		94	78-123	4	20		1
Tetrachloroethene	23.7	2.00	ug/L	20.00		119	74-129	11	20		1
Toluene	20.5	2.00	ug/L	20.00		102	80-133	5	20		1
trans-1,2-Dichloroethene	18.7	2.00	ug/L	20.00		94	75-124	8	20		1
trans-1,3-Dichloropropene	22.5	2.00	ug/L	20.00		113	73-127	0.7	20		1
Trichloroethene	22.4	2.00	ug/L	20.00		112	79-123	5	20		1
Vinyl acetate	20.0	8.00	ug/L	20.00		100	54-146	8	20		1
Vinyl chloride	22.4	2.00	ug/L	20.00		112	58-137	14	20		1
Xylenes, Total	54.8	6.00	ug/L	60.00		91	79-121	2	20		1
1,3-Dichloropropene, Total	44.4	4.00	ug/L	40.00		111	77-123	1	20		1
<hr/>											
Surrogate: Dibromofluoromethane	18.6		ug/L	20.00		93	80-135				1
Surrogate: 1,2-Dichloroethane-d4	19.8		ug/L	20.00		99	86-132				1
Surrogate: Fluorobenzene	20.5		ug/L	20.00		102	80-116				1
Surrogate: Toluene-d8	20.4		ug/L	20.00		102	73-120				1
Surrogate: 4-Bromofluorobenzene	8.72		ug/L	10.00		87	85-114				1
Surrogate: 1,2-Dichlorobenzene-d4	20.2		ug/L	20.00		101	88-136				1

**Certified Analyses included in this Report**

Analyte	CAS #	Certifications
<b>SM2540G in Solid</b>		
Total Solids	Moist	WDNR,DoD
<b>SW-846 8260B/WDNR: PUBL-FW-140 in Solid</b>		
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
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
Ethylbenzene	100-41-4	WDNR
m,p-Xylene	179601-23-1	WDNR
Methyl tert-butyl ether	1634-04-4	WDNR
Methylene chloride	75-09-2	WDNR
o-Xylene	95-47-6	WDNR
Styrene	100-42-5	WDNR
Tetrachloroethene	127-18-4	WDNR
Toluene	108-88-3	WDNR
trans-1,2-Dichloroethene	156-60-5	WDNR
Trichloroethene	79-01-6	WDNR
Vinyl acetate	108-05-4	WDNR
Vinyl chloride	75-01-4	WDNR
Xylenes, Total	1330-20-7	WDNR
1,2-Dichloroethene, Total	540-59-0	WDNR

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

Analyte	CAS #	Certifications
<b><i>SW-846 8260B/WDNR: PUBL-FW-140 in Water</i></b>		
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
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
Acrolein	107-02-8	WDNR
Acrylonitrile	107-13-1	WDNR
Benzene	71-43-2	WDNR
Bromodichloromethane	75-27-4	WDNR
Bromoform	75-25-2	WDNR
Bromomethane	74-83-9	WDNR
Carbon disulfide	75-15-0	WDNR
Carbon tetrachloride	56-23-5	WDNR
Chlorobenzene	108-90-7	WDNR
Chloroethane	75-00-3	WDNR
Chloroform	67-66-3	WDNR
Chloromethane	74-87-3	WDNR
cis-1,2-Dichloroethene	156-59-2	WDNR
cis-1,3-Dichloropropene	10061-01-5	WDNR
Dibromochloromethane	124-48-1	WDNR
Ethylbenzene	100-41-4	WDNR
m,p-Xylene	179601-23-1	WDNR
Methyl tert-butyl ether	1634-04-4	WDNR
Methylene chloride	75-09-2	WDNR
o-Xylene	95-47-6	WDNR
Styrene	100-42-5	WDNR
Tetrachloroethene	127-18-4	WDNR
Toluene	108-88-3	WDNR
trans-1,2-Dichloroethene	156-60-5	WDNR
trans-1,3-Dichloropropene	10061-02-6	WDNR
Trichloroethene	79-01-6	WDNR
Vinyl acetate	108-05-4	WDNR

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

Analyte	CAS #	Certifications
<b>SW-846 8260B/WDNR: PUBL-FW-140 in Water (Continued)</b>		
Vinyl chloride	75-01-4	WDNR
Xylenes, Total	1330-20-7	WDNR
1,3-Dichloropropene, Total	542-75-6	WDNR

**List of Certifications**

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	04/30/2020
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2020
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2020
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	07/27/2019
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2020
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2019

### Qualifiers and Definitions

Item	Description
J	The reported result is an estimated value.
%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 the Reporting Limit is equivalent to LOQ.





**ENVIRON  
MONITORII  
TECHNOLOG**

8100 North Austin Avenue  
Morton Grove, Illinois 600



19E0242  
PM: Jacoby Jackson  
United Engineering Consultants, Inc.  
UEC Analysis

**Chain of Custody Record**

47-967-6666  
AX: 847-967-6735  
www.emt.com

Due Date: \_\_\_\_\_ COC #: **215200**

TURNAROUND TIME:  
 RUSH  
 \_\_\_\_\_ day turnaround  
 ROUTINE

Company: United Engineering Consultants, Inc.  
 Address: 16237 W. Ryerson Rd  
New Berlin, WI 53121  
 Phone #: (262) 785-1447 Fax #: ( ) -  
 P.O. #: \_\_\_\_\_ Proj. #: \_\_\_\_\_  
 Client Contact: T. Anderson  
 Project ID / Location: 19006

**Sample Type:**  
 1. Waste Water 4. Sludge 7. Groundwater (filtered)  
 2. Drinking Water 5. Oil 8. Other  
 3. Soil 6. Groundwater \_\_\_\_\_

**Container Type:**  
 P - Plastic V - VOC Vial O - Other  
 G - Glass B - Tedlar Bag \_\_\_\_\_

**Preservative:**  
 1. None 4. NaOH 7. Zn Ace  
 2. H2SO4 5. HCl 8. Other  
 3. HNO3 6. MeOH \_\_\_\_\_

**Analyses**

EMT USE ONLY

EMT WORKORDER #19E0242

Sample I.D.	Sample Type	Container			Sampling					Preservation		Field	Lab	EMT USE ONLY
		Size	Type	No.	By	Date	Time	pH	Temp.	Field	Lab			
GP-1 2'-3'	3	4oz/40.oz	G	1/1	KH	5/1/19	12:30	-	-	1/6	✓			01AB
GP-1 5'-6'	↓	↓	↓	↓	↓	↓	12:45	-	-	↓	✓			02AB
GP-1 13'-14'	↓	↓	↓	↓	↓	↓	1:00	-	-	↓	✓			03AB
GP-2 3'-4'	↓	↓	↓	↓	↓	↓	1:30	-	-	↓	✓			04AB
GP-2 7'-8'	↓	↓	↓	↓	↓	↓	1:45	-	-	↓	✓			05AB
GP-2 15'-16'	↓	↓	↓	↓	↓	↓	2:00	-	-	↓	✓			06AB
GP-3 3'-4'	↓	↓	↓	↓	↓	↓	2:30	-	-	↓	✓			07AB
GP-3 6'-7'	↓	↓	↓	↓	↓	↓	2:45	-	-	↓	✓			08AB
GP-3 13'-14'	↓	↓	↓	↓	↓	↓	3:00	-	-	↓	✓			09AB

Relinquished By: <u>[Signature]</u> Date: <u>5-3-19</u> Time: <u>1240</u>	Received By: <u>[Signature]</u> Date: <u>5-3-19</u> Time: <u>1240</u>	EMT USE ONLY Client Code:	<input checked="" type="checkbox"/> SAMPLE RECEIVED ON ICE <input type="checkbox"/> TEMPERATURE  <u>1.0</u> <b>EMT SAMPLE RETURN POLICY ON BACK</b>
Relinquished By: <u>[Signature]</u> Date: <u>5-3-19</u> Time: <u>1645</u>	Received By: _____ Date: _____ Time: _____	EMT Project I.D.	
Relinquished By: _____ Date: _____ Time: _____	Received For Lab By: <u>[Signature]</u> Date: <u>5-3-19</u> Time: <u>16:45</u>	Jar Lot No.	

**SPECIAL INSTRUCTIONS:**



## Sample Receipt Checklist

Work Order: 19E0242

Printed: 5/3/2019 5:15:03PM

Client: <b>United Engineering Consultants, Inc.</b> Project: <b>UEC Analysis</b>	Date Due: <b>05/10/19 17:00 (5 day TAT)</b>
---	---

Received By:	Stephanie Canchola	Date Received:	05/03/19 16:45
Logged In By:	Stephanie Canchola	Date Logged In:	05/03/19 17:14

Samples Received at:	1.6°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	Yes
Sufficient Sample Volume	Yes
Samples Within Holdtime	Yes
Cooler Temp Within Limits	Yes
VOA Water Vials Received	No
VOA Water Vials/Zero Headspace	NA
PM or Client Contacted	No

COMMENTS

SC

5-3-19



**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue  
Morton Grove, Illinois 60053-3203

**Chain of Custody Record**

847-967-6666  
FAX: 847-967-6735  
www.emt.com

TURNAROUND TIME:  
 RUSH  
 \_\_\_ day turnaround  
 ROUTINE

Due Date: \_\_\_-\_\_\_-\_\_\_ COC #: **157953**

Company: VEL, INC.  
 Address: 16237 W. RYERSON ROAD  
NEW BERLIN, WI 53151  
 Phone #: (262) 785-1447 Fax #: (262) 206-4400  
 P.O. #: \_\_\_\_\_ Proj. #: \_\_\_\_\_  
 Client Contact: T. ANDERSON  
 Project ID / Location: 19006

**Sample Type:**  
 1. Waste Water 4. Sludge 7. Groundwater (filtered)  
 2. Drinking Water 5. Oil 8. Other  
 3. Soil 6. Groundwater \_\_\_\_\_

**Container Type:**  
 P - Plastic V - VOC Vial O - Other  
 G - Glass B - Teclor Bag \_\_\_\_\_

**Preservative:**  
 1. None 4. NaOH 7. Zn Ace  
 2. H<sub>2</sub>SO<sub>4</sub> 5. HCl 8. Other  
 3. HNO<sub>3</sub> 6. MeOH \_\_\_\_\_

**Analyses**

EMT USE ONLY  EMT WORKORDER # _____											

VOC

Sample I.D.	Sample Type	Container			Sampling					Preservation		VOC									
		Size	Type	No.	By	Date	Time	pH	Temp.	Field	Lab										
TW-1	6	40ML	G	3	KH	5/1/19	13:15	-	-	5		✓									
TW-2	6	↓	↓	↓	KH	↓	14:15	-	-	↓		✓									
TW-3	6	↓	↓	↓	KH	↓	15:15	-	-	↓		✓									

Relinquished By: <i>T. Anderson</i>	Date: <u>05-3-19</u> Time: <u>12:40</u>	Received By:	Date: - - Time: :	EMT USE ONLY	<input type="checkbox"/> SAMPLE RECEIVED ON ICE <input type="checkbox"/> TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)  <b>EMT SAMPLE RETURN POLICY ON BACK</b>
Relinquished By:	Date: - - Time: :	Received By:	Date: - - Time: :	Client Code:	
Relinquished By:	Date: - - Time: :	Received For Lab By:	Date: - - Time: :	EMT Project I.D.	
				Jar Lot No.	

**SPECIAL INSTRUCTIONS:**

EMT-FORM-GEN-028

May 09, 2019

Mr. Timothy Anderson  
United Engineering  
16237 W. Ryerson Rd.  
New Berlin, WI 53151

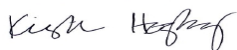
RE: Project: 19006  
Pace Project No.: 10473345

Dear Mr. Anderson:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: 19006  
Pace Project No.: 10473345

---

### Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485  
A2LA Certification #: 2926.01  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
CNMI Saipan Certification #: MP0003  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605  
Georgia Certification #: 959  
Guam EPA Certification #: MN00064  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: 03086  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064  
Maryland Certification #: 322  
Massachusetts Certification #: M-MN064  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137  
Minnesota Petrofund Certification #: 1240  
Mississippi Certification #: MN00064  
Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081  
New Jersey Certification #: MN002  
New York Certification #: 11647  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification #: CL101  
Oklahoma Certification #: 9507  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001  
Pennsylvania Certification #: 68-00563  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192  
Utah Certification #: MN00064  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163  
Washington Certification #: C486  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: 19006  
Pace Project No.: 10473345

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10473345001	VP-1	Air	05/01/19 11:49	05/03/19 13:00
10473345002	VP-2	Air	05/01/19 11:55	05/03/19 13:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: 19006  
Pace Project No.: 10473345

---

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10473345001	VP-1	TO-15	AFV	22	PASI-M
10473345002	VP-2	TO-15	AFV	22	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: 19006  
Pace Project No.: 10473345

**Sample: VP-1**      **Lab ID: 10473345001**      Collected: 05/01/19 11:49      Received: 05/03/19 13:00      Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
Carbon tetrachloride	<0.79	ug/m3	2.3	0.79	1.83		05/06/19 19:47	56-23-5	
Chloroethane	<0.48	ug/m3	0.98	0.48	1.83		05/06/19 19:47	75-00-3	
Chloroform	6.8	ug/m3	0.91	0.36	1.83		05/06/19 19:47	67-66-3	
Chloromethane	<0.29	ug/m3	0.77	0.29	1.83		05/06/19 19:47	74-87-3	
1,2-Dichlorobenzene	<0.91	ug/m3	2.2	0.91	1.83		05/06/19 19:47	95-50-1	
1,4-Dichlorobenzene	<1.8	ug/m3	5.6	1.8	1.83		05/06/19 19:47	106-46-7	
Dichlorodifluoromethane	2.3	ug/m3	1.8	0.54	1.83		05/06/19 19:47	75-71-8	
1,1-Dichloroethane	<0.41	ug/m3	1.5	0.41	1.83		05/06/19 19:47	75-34-3	
1,2-Dichloroethane	<0.27	ug/m3	0.75	0.27	1.83		05/06/19 19:47	107-06-2	
1,1-Dichloroethene	<0.50	ug/m3	1.5	0.50	1.83		05/06/19 19:47	75-35-4	
cis-1,2-Dichloroethene	<0.40	ug/m3	1.5	0.40	1.83		05/06/19 19:47	156-59-2	
trans-1,2-Dichloroethene	<0.52	ug/m3	1.5	0.52	1.83		05/06/19 19:47	156-60-5	
Hexachloro-1,3-butadiene	<3.6	ug/m3	9.9	3.6	1.83		05/06/19 19:47	87-68-3	
Methylene Chloride	19.4	ug/m3	6.5	1.7	1.83		05/06/19 19:47	75-09-2	
1,1,2,2-Tetrachloroethane	<0.53	ug/m3	1.3	0.53	1.83		05/06/19 19:47	79-34-5	
Tetrachloroethene	18500	ug/m3	605	276	878.4		05/07/19 13:12	127-18-4	
1,2,4-Trichlorobenzene	<6.8	ug/m3	13.8	6.8	1.83		05/06/19 19:47	120-82-1	
1,1,1-Trichloroethane	4.1	ug/m3	2.0	0.57	1.83		05/06/19 19:47	71-55-6	
1,1,2-Trichloroethane	<0.46	ug/m3	1.0	0.46	1.83		05/06/19 19:47	79-00-5	
Trichloroethene	18.2	ug/m3	1.0	0.47	1.83		05/06/19 19:47	79-01-6	
Trichlorofluoromethane	<0.67	ug/m3	2.1	0.67	1.83		05/06/19 19:47	75-69-4	
Vinyl chloride	<0.23	ug/m3	0.48	0.23	1.83		05/06/19 19:47	75-01-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 19006  
Pace Project No.: 10473345

**Sample: VP-2**      **Lab ID: 10473345002**      Collected: 05/01/19 11:55      Received: 05/03/19 13:00      Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
Carbon tetrachloride	<0.79	ug/m3	2.3	0.79	1.83		05/06/19 20:18	56-23-5	
Chloroethane	<0.48	ug/m3	0.98	0.48	1.83		05/06/19 20:18	75-00-3	
Chloroform	<0.36	ug/m3	0.91	0.36	1.83		05/06/19 20:18	67-66-3	
Chloromethane	<0.29	ug/m3	0.77	0.29	1.83		05/06/19 20:18	74-87-3	
1,2-Dichlorobenzene	<0.91	ug/m3	2.2	0.91	1.83		05/06/19 20:18	95-50-1	
1,4-Dichlorobenzene	<1.8	ug/m3	5.6	1.8	1.83		05/06/19 20:18	106-46-7	
Dichlorodifluoromethane	2.3	ug/m3	1.8	0.54	1.83		05/06/19 20:18	75-71-8	
1,1-Dichloroethane	<0.41	ug/m3	1.5	0.41	1.83		05/06/19 20:18	75-34-3	
1,2-Dichloroethane	<0.27	ug/m3	0.75	0.27	1.83		05/06/19 20:18	107-06-2	
1,1-Dichloroethene	<0.50	ug/m3	1.5	0.50	1.83		05/06/19 20:18	75-35-4	
cis-1,2-Dichloroethene	<0.40	ug/m3	1.5	0.40	1.83		05/06/19 20:18	156-59-2	
trans-1,2-Dichloroethene	<0.52	ug/m3	1.5	0.52	1.83		05/06/19 20:18	156-60-5	
Hexachloro-1,3-butadiene	<3.6	ug/m3	9.9	3.6	1.83		05/06/19 20:18	87-68-3	
Methylene Chloride	6.3J	ug/m3	6.5	1.7	1.83		05/06/19 20:18	75-09-2	
1,1,2,2-Tetrachloroethane	<0.53	ug/m3	1.3	0.53	1.83		05/06/19 20:18	79-34-5	
Tetrachloroethene	1510	ug/m3	37.8	17.2	54.9		05/07/19 13:41	127-18-4	
1,2,4-Trichlorobenzene	<6.8	ug/m3	13.8	6.8	1.83		05/06/19 20:18	120-82-1	
1,1,1-Trichloroethane	11.9	ug/m3	2.0	0.57	1.83		05/06/19 20:18	71-55-6	
1,1,2-Trichloroethane	<0.46	ug/m3	1.0	0.46	1.83		05/06/19 20:18	79-00-5	
Trichloroethene	2.7	ug/m3	1.0	0.47	1.83		05/06/19 20:18	79-01-6	
Trichlorofluoromethane	<0.67	ug/m3	2.1	0.67	1.83		05/06/19 20:18	75-69-4	
Vinyl chloride	<0.23	ug/m3	0.48	0.23	1.83		05/06/19 20:18	75-01-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 19006  
Pace Project No.: 10473345

QC Batch: 604034 Analysis Method: TO-15  
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level  
Associated Lab Samples: 10473345001, 10473345002

METHOD BLANK: 3265808 Matrix: Air  
Associated Lab Samples: 10473345001, 10473345002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.31	1.1	05/06/19 15:04	
1,1,2,2-Tetrachloroethane	ug/m3	<0.29	0.70	05/06/19 15:04	
1,1,2-Trichloroethane	ug/m3	<0.25	0.56	05/06/19 15:04	
1,1-Dichloroethane	ug/m3	<0.22	0.82	05/06/19 15:04	
1,1-Dichloroethene	ug/m3	<0.27	0.81	05/06/19 15:04	
1,2,4-Trichlorobenzene	ug/m3	<3.7	7.5	05/06/19 15:04	
1,2-Dichlorobenzene	ug/m3	<0.50	1.2	05/06/19 15:04	
1,2-Dichloroethane	ug/m3	<0.15	0.41	05/06/19 15:04	
1,4-Dichlorobenzene	ug/m3	<1.0	3.1	05/06/19 15:04	
Carbon tetrachloride	ug/m3	<0.43	1.3	05/06/19 15:04	
Chloroethane	ug/m3	<0.26	0.54	05/06/19 15:04	
Chloroform	ug/m3	<0.20	0.50	05/06/19 15:04	
Chloromethane	ug/m3	<0.16	0.42	05/06/19 15:04	
cis-1,2-Dichloroethene	ug/m3	<0.22	0.81	05/06/19 15:04	
Dichlorodifluoromethane	ug/m3	<0.29	1.0	05/06/19 15:04	
Hexachloro-1,3-butadiene	ug/m3	<2.0	5.4	05/06/19 15:04	
Methylene Chloride	ug/m3	<0.94	3.5	05/06/19 15:04	
Tetrachloroethane	ug/m3	<0.31	0.69	05/06/19 15:04	
trans-1,2-Dichloroethene	ug/m3	<0.28	0.81	05/06/19 15:04	
Trichloroethene	ug/m3	<0.26	0.55	05/06/19 15:04	
Trichlorofluoromethane	ug/m3	<0.37	1.1	05/06/19 15:04	
Vinyl chloride	ug/m3	<0.13	0.26	05/06/19 15:04	

LABORATORY CONTROL SAMPLE: 3265809

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	57.9	104	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	80.9	116	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	62.4	112	70-130	
1,1-Dichloroethane	ug/m3	41.1	42.5	103	70-130	
1,1-Dichloroethene	ug/m3	40.3	44.0	109	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	73.4	97	56-130	
1,2-Dichlorobenzene	ug/m3	61.1	73.2	120	70-132	
1,2-Dichloroethane	ug/m3	41.1	42.6	104	70-130	
1,4-Dichlorobenzene	ug/m3	61.1	74.6	122	70-134	
Carbon tetrachloride	ug/m3	64	65.8	103	66-131	
Chloroethane	ug/m3	26.8	31.0	115	70-130	
Chloroform	ug/m3	49.6	50.9	103	70-130	
Chloromethane	ug/m3	21	21.4	102	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	41.3	102	70-130	

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

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: 19006  
Pace Project No.: 10473345

LABORATORY CONTROL SAMPLE: 3265809

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/m3	50.3	49.9	99	70-130	
Hexachloro-1,3-butadiene	ug/m3	108	119	110	66-137	
Methylene Chloride	ug/m3	177	167	94	65-130	
Tetrachloroethene	ug/m3	68.9	73.2	106	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	41.8	104	70-130	
Trichloroethene	ug/m3	54.6	56.1	103	70-130	
Trichlorofluoromethane	ug/m3	57.1	59.7	104	65-130	
Vinyl chloride	ug/m3	26	26.5	102	70-130	

SAMPLE DUPLICATE: 3266482

Parameter	Units	20102874001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<0.40			25
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.38			25
1,1,2-Trichloroethane	ug/m3	ND	<0.32			25
1,1-Dichloroethane	ug/m3	ND	<0.29			25
1,1-Dichloroethene	ug/m3	ND	<0.36			25
1,2,4-Trichlorobenzene	ug/m3	ND	<4.8			25
1,2-Dichlorobenzene	ug/m3	ND	<0.65			25
1,2-Dichloroethane	ug/m3	ND	<0.20			25
1,4-Dichlorobenzene	ug/m3	ND	<1.3			25
Carbon tetrachloride	ug/m3	ND	<0.56			25
Chloroethane	ug/m3	ND	<0.34			25
Chloroform	ug/m3	ND	<0.25			25
Chloromethane	ug/m3	0.99	0.88	12		25
cis-1,2-Dichloroethene	ug/m3	ND	<0.28			25
Dichlorodifluoromethane	ug/m3	2.1	2.1	1		25
Hexachloro-1,3-butadiene	ug/m3	ND	<2.6			25
Methylene Chloride	ug/m3	ND	2.3J			25
Tetrachloroethene	ug/m3	ND	<0.41			25
trans-1,2-Dichloroethene	ug/m3	ND	<0.37			25
Trichloroethene	ug/m3	ND	<0.33			25
Trichlorofluoromethane	ug/m3	ND	<0.48			25
Vinyl chloride	ug/m3	ND	<0.16			25

SAMPLE DUPLICATE: 3266483

Parameter	Units	20102874002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<0.40			25
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.38			25
1,1,2-Trichloroethane	ug/m3	ND	<0.32			25
1,1-Dichloroethane	ug/m3	ND	<0.29			25
1,1-Dichloroethene	ug/m3	ND	<0.36			25
1,2,4-Trichlorobenzene	ug/m3	ND	<4.8			25

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

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: 19006  
Pace Project No.: 10473345

SAMPLE DUPLICATE: 3266483

Parameter	Units	20102874002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichlorobenzene	ug/m3	ND	<0.65		25	
1,2-Dichloroethane	ug/m3	ND	<0.20		25	
1,4-Dichlorobenzene	ug/m3	ND	<1.3		25	
Carbon tetrachloride	ug/m3	ND	<0.56		25	
Chloroethane	ug/m3	ND	<0.34		25	
Chloroform	ug/m3	ND	<0.25		25	
Chloromethane	ug/m3	0.91	0.85	7	25	
cis-1,2-Dichloroethene	ug/m3	ND	<0.28		25	
Dichlorodifluoromethane	ug/m3	2.1	2.0	2	25	
Hexachloro-1,3-butadiene	ug/m3	ND	<2.6		25	
Methylene Chloride	ug/m3	ND	2.4J		25	
Tetrachloroethene	ug/m3	ND	<0.41		25	
trans-1,2-Dichloroethene	ug/m3	ND	<0.37		25	
Trichloroethene	ug/m3	ND	<0.33		25	
Trichlorofluoromethane	ug/m3	ND	<0.48		25	
Vinyl chloride	ug/m3	ND	<0.16		25	

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

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: 19006  
Pace Project No.: 10473345

---

### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 19006  
Pace Project No.: 10473345

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>QC Batch Method</b>	<b>QC Batch</b>	<b>Analytical Method</b>	<b>Analytical Batch</b>
10473345001	VP-1	TO-15	604034		
10473345002	VP-2	TO-15	604034		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.





# AIR: CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All relev

WO#: 10473345



<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:	35815	Page: 1 of 1
Company: <u>United Engineering Consultants, Inc</u>	Report To: <u>Tim Anderson</u>	Attention: <u>Same</u>	Program	
Address: <u>16237 W. Ryerson Rd</u> <u>New Berlin, WI 53151</u>	Copy To:	Company Name:	<input type="checkbox"/> UST <input type="checkbox"/> Superfund <input type="checkbox"/> Emissions <input type="checkbox"/> Clean Air Act <input type="checkbox"/> Voluntary Clean Up <input type="checkbox"/> Dry Clean <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> Other	
Email To: <u>tqurec@sbglobal.net</u>	Purchase Order No.:	Address:	Location of Sampling by State: <u>WI</u>	
Phone: <u>(262) 785-1447</u> Fax: <u>(262) 706-4400</u>	Project Name: <u>19006</u>	Pace Quote Reference:	Reporting Units <input checked="" type="checkbox"/> ug/m <sup>3</sup> <input type="checkbox"/> mg/m <sup>3</sup> <input type="checkbox"/> PPBV <input type="checkbox"/> PPMV Other _____	
Requested Due Date/TAT:	Project Number:	Pace Project Manager/Sales Rep.	Report Level: <u>II</u> <input type="checkbox"/> <u>III</u> <input type="checkbox"/> <u>IV</u> <input type="checkbox"/> Other _____	
		Pace Profile #: <u>22083</u>		

ITEM #	Section D Required Client Information <b>AIR SAMPLE ID</b> Sample IDs MUST BE UNIQUE	Valid Media Codes MEDIA CODE Tedlar Bag TB 1 Liter Summa Can 1LC 6 Liter Summa Can 6LC Low Volume Puff LVP High Volume Puff HVP Other PM10	MEDIA CODE	PID Reading (Client only)	COLLECTED				Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: <input type="checkbox"/> PM10 <input type="checkbox"/> 3c - Filter Gas (%) <input type="checkbox"/> TO-3 BTEX <input type="checkbox"/> TO-3M (Methane) <input type="checkbox"/> TO-14 <input type="checkbox"/> TO-15 Full List VOCs <input checked="" type="checkbox"/> TO-15 Short List BTEX <input type="checkbox"/> TO-15 Short List Chlorinated	Pace Lab ID
					COMPOSITE START		COMPOSITE - END/GRAB							
					DATE	TIME	DATE	TIME						
1	VP-1		6LL	/	5/11/19	11:19	5/11	11:49	30	10	53			001
2	VP-2		6LL	/	5/11/19	11:25	5/11	11:55	28	8	58			002
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Comments :	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
	<u>UEL Inc</u>	<u>5/11/19</u>	<u>16:16</u>	<u>[Signature]</u>	<u>05/02/19</u>	<u>1300</u>	-	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> Y
								<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y
								<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y

SAMPLER NAME AND SIGNATURE		Temp in °C
PRINT Name of SAMPLER: <u>Kyle Hennig</u>	Received on Ice	
SIGNATURE of SAMPLER: <u>[Signature]</u>	Custody Sealed Cooler	
DATE Signed (MM/DD/YY) <u>5/11/19</u>		Samples Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N

ORIGINAL



Document Name:  
**Air Sample Condition Upon Receipt**

Document No.:  
**F-MN-A-106-rev.18**

Document Revised: 31Jan2019  
Page 1 of 1

Issuing Authority:  
Pace Minnesota Quality Office

**Air Sample Condition Upon Receipt**

Client Name: United Engineering

Project #: \_\_\_\_\_

**WO#: 10473345**

PM: **KNH** Due Date: **05/10/19**  
CLIENT: **United Eng**

Courier:  Fed Ex  UPS  USPS  Client  
 Pace  SpeedDee  Commercial See Exception

Tracking Number: 4545 9911 7568

Custody Seal on Cooler/Box Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  Foam  None  Tin Can  Other: \_\_\_\_\_ Temp Blank rec:  Yes  No

Temp. (TO17 and TO13 samples only) (°C): \_\_\_\_\_ Corrected Temp (°C): \_\_\_\_\_ Thermometer Used:  G87A9170600254  G87A9155100842

Temp should be above freezing to 6°C Correction Factor: \_\_\_\_\_ Date & Initials of Person Examining Contents: 05/03/19 CJ

Type of Ice Received  Blue  Wet  None

**Comments:**

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No	10.
Media: <u>Air Can</u> Airbag Filter TDT Passive		11. Individually Certified Cans Y <input checked="" type="checkbox"/> N (list which samples)
Is sufficient information available to reconcile samples to the COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
Do cans need to be pressurized (3C and ASTM 1946 DO NOT PRESSURIZE)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	13.

Samples Received: \_\_\_\_\_ Pressure Gauge #  10AIR34  10AIR35

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
1	0053	1828	-8.0	+5.0					
2	2658	0797	"	"					

**CLIENT NOTIFICATION/RESOLUTION**

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

Project Manager Review: Kirsten Hopper Date: 5/3/2019

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)