



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

IL Route 176 (Eastbound) IDOT STA 491+02.42 to 492+30 (ISGS Site 2490V2-1)

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: \_\_\_\_\_ BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Soil from boring B01 was sampled adjacent to ISGS Site No 2490V2-1.  
See Exhibits 2, 2A, and Table 1 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141878-1.  
Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

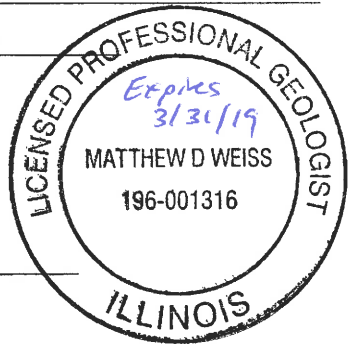
**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

Matt Weiss  
 Printed Name:

[Signature]  
 Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:

10/12/18  
 Date:



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-1)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 1 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-1-B01 (0-3)
				CCDD	Sample Depth (feet)	(0-3)
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	03/07/18
<b>Volatile Organic Analytical Parameters</b>						
Acetone	mg/kg	---	---	25		0.018
<b>Semivolatile Organic Analytical Parameters</b>						
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.011
Fluoranthene	mg/kg	2.7	4.1	3100		0.01
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		5.7
Barium	mg/kg	---	110	1500		100
Cadmium	mg/kg	---	0.6	5.2		0.067
Chromium, total	mg/kg	---	16.2	21		21
Lead	mg/kg	---	36	107		16
Mercury	mg/kg	---	0.06	0.1		0.043
Selenium	mg/kg	---	0.48	1.3		0.85
Silver	mg/kg	---	0.55	4.4		<0.30
Antimony	mg/kg	---	4.0	5		<1.2
Beryllium	mg/kg	---	0.59	22		0.91
Calcium	mg/kg	---	9,300	---		3800
Cobalt	mg/kg	---	8.9	20		11
Copper	mg/kg	---	19.6	2900		20
Cyanide	mg/kg	---	0.51	---		<0.59
Iron	mg/kg	---	15,900	15000		21000
Magnesium	mg/kg	---	4,820	325000		4800
Manganese	mg/kg	---	636	630		470
Nickel	mg/kg	---	18	100		31
Potassium	mg/kg	---	1,268	---		1500
Sodium	mg/kg	---	130	---		1100
Thallium	mg/kg	---	0.32	2.6		<0.61
Vanadium	mg/kg	---	25.2	550		32
Zinc	mg/kg	---	95	5100		54
pH			6.25	9		7.9

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-1)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 2 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-1-B01 (0-3)
				CCDD	Sample Depth (feet)	(0-3)
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	03/07/18
<b>Inorganic Analytical Parameters (SPLP)</b>						
Antimony,SPLP	mg/L	---	---	---		-
Arsenic,SPLP	mg/L	---	---	---		--
Barium,SPLP	mg/L	---	---	---		--
Beryllium,SPLP	mg/L	---	---	---		--
Cadmium,SPLP	mg/L	---	---	---		--
Calcium,SPLP	mg/L	---	---	---		--
Chromium,SPLP	mg/L	---	---	---		--
Cobalt,SPLP	mg/L	---	---	---		--
Copper,SPLP	mg/L	---	---	---		--
Iron,SPLP	mg/L	---	---	---		--
Lead,SPLP	mg/L	---	---	---		--
Magnesium,SPLP	mg/L	---	---	---		--
Manganese,SPLP	mg/L	---	---	---		4.4
Mercury,SPLP	mg/L	---	---	---		--
Nickel,SPLP	mg/L	---	---	---		--
Potassium,SPLP	mg/L	---	---	---		--
Selenium,SPLP	mg/L	---	---	---		--
Silver,SPLP	mg/L	---	---	---		--
Sodium,SPLP	mg/L	---	---	---		--
Thallium,SPLP	mg/L	---	---	---		--
Vanadium,SPLP	mg/L	---	---	---		--
Zinc,SPLP	mg/L	---	---	---		--
Cyanide,SPLP	mg/L	---	---	---		--
<b>Inorganic Analytical Parameters (TCLP)</b>						
Arsenic,TCLP	mg/L	---	---	---		<0.050
Barium,TCLP	mg/L	---	---	---		0.37
Cadmium,TCLP	mg/L	---	---	---		0.0022
Chromium,TCLP	mg/L	---	---	---		<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050
Silver,TCLP	mg/L	---	---	---		<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		90
Cobalt,TCLP	mg/L	---	---	---		0.04
Copper,TCLP	mg/L	---	---	---		0.011
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.40
Magnesium,TCLP	mg/L	---	---	---		39
Manganese,TCLP	mg/L	---	---	---		9.7
Nickel,TCLP	mg/L	---	---	---		0.055
Potassium,TCLP	mg/L	---	---	---		0.59
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141878-1

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/19/2018 2:04:50 PM

Richard Wright, Senior Project Manager

(708)534-5200

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)



### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Job ID: 500-141878-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141878-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 2:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422971: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Client Sample ID: 2490V2-1-B01 (0-3)**

**Lab Sample ID: 500-141878-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.018		0.018	0.0076	mg/Kg	1		☼	8260B	Total/NA
Benzo[b]fluoranthene	0.011	J	0.040	0.0088	mg/Kg	1		☼	8270D	Total/NA
Fluoranthene	0.010	J	0.040	0.0076	mg/Kg	1		☼	8270D	Total/NA
Arsenic	5.7		0.61	0.21	mg/Kg	1		☼	6010B	Total/NA
Barium	100		0.61	0.069	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.91		0.24	0.057	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.067	J B	0.12	0.022	mg/Kg	1		☼	6010B	Total/NA
Chromium	21		0.61	0.30	mg/Kg	1		☼	6010B	Total/NA
Cobalt	11		0.30	0.080	mg/Kg	1		☼	6010B	Total/NA
Copper	20		0.61	0.17	mg/Kg	1		☼	6010B	Total/NA
Iron	21000		12	6.3	mg/Kg	1		☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	4800		6.1	3.0	mg/Kg	1		☼	6010B	Total/NA
Calcium	3800	B	12	2.1	mg/Kg	1		☼	6010B	Total/NA
Manganese	470		0.61	0.088	mg/Kg	1		☼	6010B	Total/NA
Nickel	31		0.61	0.18	mg/Kg	1		☼	6010B	Total/NA
Selenium	0.85		0.61	0.36	mg/Kg	1		☼	6010B	Total/NA
Vanadium	32		0.30	0.072	mg/Kg	1		☼	6010B	Total/NA
Zinc	54		1.2	0.53	mg/Kg	1		☼	6010B	Total/NA
Potassium	1500		30	11	mg/Kg	1		☼	6010B	Total/NA
Sodium	1100		61	9.0	mg/Kg	1		☼	6010B	Total/NA
Barium	0.37	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Calcium	90		5.0	0.50	mg/L	1			6010B	TCLP
Cobalt	0.040		0.025	0.010	mg/L	1			6010B	TCLP
Copper	0.011	J	0.025	0.010	mg/L	1			6010B	TCLP
Magnesium	39		2.5	0.50	mg/L	1			6010B	TCLP
Manganese	9.7		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1			6010B	TCLP
Potassium	0.59	J	2.5	0.50	mg/L	1			6010B	TCLP
Manganese	4.4		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.043		0.018	0.0061	mg/Kg	1		☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141878-1	2490V2-1-B01 (0-3)	Solid	03/07/18 09:20	03/07/18 14:45

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Client Sample ID: 2490V2-1-B01 (0-3)**

**Lab Sample ID: 500-141878-1**

Date Collected: 03/07/18 09:20

Matrix: Solid

Date Received: 03/07/18 14:45

Percent Solids: 80.8

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.018		0.018	0.0076	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Chloroethane	<0.0044 *		0.0044	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/07/18 16:00	03/10/18 15:07	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/10/18 15:07	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/07/18 16:00	03/10/18 15:07	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 15:07	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Client Sample ID: 2490V2-1-B01 (0-3)**

**Lab Sample ID: 500-141878-1**

**Date Collected: 03/07/18 09:20**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 80.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
<b>Benzo[b]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.040	0.0088	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
<b>Fluoranthene</b>	<b>0.010</b>	<b>J</b>	0.040	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Client Sample ID: 2490V2-1-B01 (0-3)**

**Lab Sample ID: 500-141878-1**

**Date Collected: 03/07/18 09:20**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 80.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		44 - 121	03/08/18 16:50	03/09/18 13:31	1
2-Fluorophenol	84		46 - 133	03/08/18 16:50	03/09/18 13:31	1
Nitrobenzene-d5	72		41 - 120	03/08/18 16:50	03/09/18 13:31	1
Phenol-d5	78		46 - 125	03/08/18 16:50	03/09/18 13:31	1
Terphenyl-d14	68		35 - 160	03/08/18 16:50	03/09/18 13:31	1
2,4,6-Tribromophenol	94		25 - 139	03/08/18 16:50	03/09/18 13:31	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Arsenic</b>	<b>5.7</b>		0.61	0.21	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Barium</b>	<b>100</b>		0.61	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Beryllium</b>	<b>0.91</b>		0.24	0.057	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Cadmium</b>	<b>0.067</b>	<b>J B</b>	0.12	0.022	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Chromium</b>	<b>21</b>		0.61	0.30	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Cobalt</b>	<b>11</b>		0.30	0.080	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Copper</b>	<b>20</b>		0.61	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Iron</b>	<b>21000</b>		12	6.3	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Lead</b>	<b>16</b>		0.30	0.14	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Magnesium</b>	<b>4800</b>		6.1	3.0	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Calcium</b>	<b>3800</b>	<b>B</b>	12	2.1	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Manganese</b>	<b>470</b>		0.61	0.088	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Nickel</b>	<b>31</b>		0.61	0.18	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Selenium</b>	<b>0.85</b>		0.61	0.36	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
Silver	<0.30		0.30	0.079	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Vanadium</b>	<b>32</b>		0.30	0.072	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Zinc</b>	<b>54</b>		1.2	0.53	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1
<b>Sodium</b>	<b>1100</b>		61	9.0	mg/Kg	☼	03/08/18 17:17	03/09/18 17:01	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
<b>Barium</b>	<b>0.37</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:51	1
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

**Client Sample ID: 2490V2-1-B01 (0-3)**

**Lab Sample ID: 500-141878-1**

**Date Collected: 03/07/18 09:20**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 80.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	90		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:51	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Cobalt	0.040		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Copper	0.011	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:51	1
Magnesium	39		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:51	1
Manganese	9.7		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Nickel	0.055		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Potassium	0.59	J	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:51	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:51	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:51	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:51	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	4.4		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:00	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:46	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:11	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.018	0.0061	mg/Kg	☼	03/09/18 15:15	03/12/18 13:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	03/15/18 10:15	03/15/18 15:41	1
pH	7.9		0.20	0.20	SU			03/13/18 15:15	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Chicago



Report To (optional)  
Contact: Matt Weiss  
Company: Terracon  
Address: \_\_\_\_\_  
Address: Naperville  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141878  
Chain of Custody Number: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 4.9

Client		Client Project #		Preservative		Parameter												Preservative Key		
<u>Terracon</u>		<u>11187007B</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Lab Project #																		
<u>Work Order #45</u>																				
Project Location/State		Lab PM																		
<u>Crystal Lake, IL</u>		<u>Ryan J. Peterson</u>																		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix														
<u>1</u>		<u>2490V2-1-B01(0-3)</u>	<u>3/7</u>	<u>920</u>	<u>3</u>	<u>S</u>	<u>VOCs</u>	<u>SUOLs</u>	<u>Total TAL</u>	<u>23 Inorg-</u>	<u>PH</u>	<u>TCLP TAL</u>	<u>23 Inorg</u>	<u>SPLP TAL</u>	<u>23 Inorg</u>					
																				Comments

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days  10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Date Date: \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/7/18</u> Time: <u>1340</u>	Received By <u>[Signature]</u> Company: <u>JFA</u> Date: <u>3/7/18</u> Time: <u>1345</u>
Relinquished By <u>[Signature]</u> Company: <u>JFA</u> Date: <u>3/7/18</u> Time: <u>1445</u>	Received By <u>[Signature]</u> Company: <u>TA-CRE</u> Date: <u>3/7/18</u> Time: <u>1445</u>

Lab Courier: TA  
Shipped: \_\_\_\_\_  
Hand Delivered: \_\_\_\_\_

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
\* No AL  
\* Hold SPLP

Lab Comments:  
 \_\_\_\_\_



## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141878-1

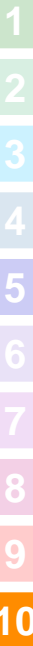
**Login Number: 141878**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

IL Route 176 (Westbound) IDOT STA 491+02.42 to 493+40 (ISGS Site 2490V2-2)

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: \_\_\_\_\_ BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Soil from borings B01 and B02 were sampled adjacent to ISGS Site No 2490V2-2.  
See Exhibits 2, 2A, and Table 3 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141818-5.  
Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

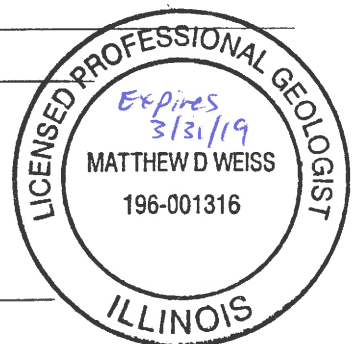
**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

Matt Weiss  
 Printed Name:

[Signature]  
 Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:

10/12/18  
 Date:



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A  
Preliminary Site Investigation  
FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-2)  
Crystal Lake, IL  
Terracon Project No. 11187007B  
Page 1 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-2-B01 (0-3)	2490V2-2-B02 (0-3)
				CCDD	Sample Depth (feet)	0-3	0-3
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	03/06/18	03/06/18
<b>Volatile Organic Analytical Parameters</b>							
Acetone	mg/kg	---	---	25		0.028	<0.017
2-Butanone	mg/kg	---	---	17		0.0039	<0.0041
<b>Semivolatile Organic Analytical Parameters</b>							
Acenaphthene	mg/kg	0.09	0.13	570		<0.038	0.007
Acenaphthylene	mg/kg	0.03	0.07	85		0.0055	<0.038
Anthracene	mg/kg	0.25	0.4	12000		0.015	0.021
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.1	0.12
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.17	0.16
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.25	0.25
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.1	0.099
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.12	0.094
Chrysene	mg/kg	1.2	2.7	88		0.15	0.17
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.028	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		0.26	0.27
Fluorene	mg/kg	0.1	0.18	560		<0.038	0.0063
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.096	0.082
Phenanthrene	mg/kg	1.3	2.5	210		0.073	0.13
Pyrene	mg/kg	1.9	3.0	2300		0.18	0.25
<b>Inorganic Analytical Parameters</b>							
Arsenic	mg/kg	---	13	11.3		5.6	6.3
Barium	mg/kg	---	110	1500		81	50
Cadmium	mg/kg	---	0.6	5.2		0.12	0.16
Chromium, total	mg/kg	---	16.2	21		19	18
Lead	mg/kg	---	36	107		27	36
Mercury	mg/kg	---	0.06	0.1		0.033	0.028
Selenium	mg/kg	---	0.48	1.3		0.88	0.7
Silver	mg/kg	---	0.55	4.4		<0.27	<0.28
Antimony	mg/kg	---	4.0	5		<1.1	<1.1
Beryllium	mg/kg	---	0.59	22		0.7	0.69
Calcium	mg/kg	---	9,300	---		18000	16000
Cobalt	mg/kg	---	8.9	20		10	11
Copper	mg/kg	---	19.6	2900		20	20
Cyanide	mg/kg	---	0.51	---		<0.57	<0.55
Iron	mg/kg	---	15,900	15000		18000	20000
Magnesium	mg/kg	---	4,820	325000		12000	12000
Manganese	mg/kg	---	636	630		390	480
Nickel	mg/kg	---	18	100		21	24
Potassium	mg/kg	---	1,268	---		1600	1800
Sodium	mg/kg	---	130	---		1700	1900
Thallium	mg/kg	---	0.32	2.6		<0.54	<0.57
Vanadium	mg/kg	---	25.2	550		27	25
Zinc	mg/kg	---	95	5100		55	64
pH			6.25	9		8.1	8.1

**Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A**  
**Preliminary Site Investigation**  
**FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-2)**  
**Crystal Lake, IL**  
**Terracon Project No. 11187007B**  
**Page 2 of 2**

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-2-B01 (0-3)	2490V2-2-B02 (0-3)
				CCDD	Sample Depth (feet)	0-3	0-3
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	03/06/18	03/06/18
<b>Inorganic Analytical Parameters (SPLP)</b>							
Antimony,SPLP	mg/L	---	---	---		-	-
Arsenic,SPLP	mg/L	---	---	---		--	--
Barium,SPLP	mg/L	---	---	---		--	--
Beryllium,SPLP	mg/L	---	---	---		--	--
Cadmium,SPLP	mg/L	---	---	---		--	--
Calcium,SPLP	mg/L	---	---	---		--	--
Chromium,SPLP	mg/L	---	---	---		--	--
Cobalt,SPLP	mg/L	---	---	---		--	--
Copper,SPLP	mg/L	---	---	---		--	--
Iron,SPLP	mg/L	---	---	---		--	--
Lead,SPLP	mg/L	---	---	---		--	0.3
Magnesium,SPLP	mg/L	---	---	---		--	--
Manganese,SPLP	mg/L	---	---	---		2	1.1
Mercury,SPLP	mg/L	---	---	---		--	--
Nickel,SPLP	mg/L	---	---	---		--	--
Potassium,SPLP	mg/L	---	---	---		--	--
Selenium,SPLP	mg/L	---	---	---		--	--
Silver,SPLP	mg/L	---	---	---		--	--
Sodium,SPLP	mg/L	---	---	---		--	--
Thallium,SPLP	mg/L	---	---	---		--	--
Vanadium,SPLP	mg/L	---	---	---		--	--
Zinc,SPLP	mg/L	---	---	---		--	--
Cyanide,SPLP	mg/L	---	---	---		--	--
<b>Inorganic Analytical Parameters (TCLP)</b>							
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.55	0.45
Cadmium,TCLP	mg/L	---	---	---		0.0024	0.0036
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	0.016
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		290	260
Cobalt,TCLP	mg/L	---	---	---		0.029	0.048
Copper,TCLP	mg/L	---	---	---		0.011	0.014
Cyanide,TCLP	mg/L	---	---	---		--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		110	110
Manganese,TCLP	mg/L	---	---	---		10	8.7
Nickel,TCLP	mg/L	---	---	---		0.019	0.021
Potassium,TCLP	mg/L	---	---	---		1.2	3.4
Sodium,TCLP	mg/L	---	---	---		--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.036	0.064

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141818-3

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/16/2018 3:27:47 PM

Richard Wright, Senior Project Manager

(708)534-5200

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Job ID: 500-141818-3**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141818-3

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 9:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.6° C, 2.9° C and 3.1° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422818: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B01 (0-3)**

**Lab Sample ID: 500-141818-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.028		0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA	
2-Butanone (MEK)	0.0039	J	0.0041	0.0018	mg/Kg	1	☼	8260B	Total/NA	
Acenaphthylene	0.0055	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA	
Anthracene	0.015	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]anthracene	0.10		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]pyrene	0.17		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA	
Benzo[b]fluoranthene	0.25		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA	
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA	
Benzo[k]fluoranthene	0.12		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA	
Chrysene	0.15		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA	
Dibenz(a,h)anthracene	0.028	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA	
Fluoranthene	0.26		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	0.096		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA	
Phenanthrene	0.073		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA	
Pyrene	0.18		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA	
Arsenic	5.6		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA	
Barium	81		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.70		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA	
Chromium	19		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	10		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA	
Copper	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA	
Iron	18000		11	5.6	mg/Kg	1	☼	6010B	Total/NA	
Lead	27		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	12000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA	
Calcium	18000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA	
Manganese	390		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA	
Nickel	21		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.88		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	27		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA	
Zinc	55		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA	
Potassium	1600		27	9.6	mg/Kg	1	☼	6010B	Total/NA	
Sodium	1700		54	8.0	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP	
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP	
Calcium	290		5.0	0.50	mg/L	1		6010B	TCLP	
Cobalt	0.029		0.025	0.010	mg/L	1		6010B	TCLP	
Copper	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP	
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP	
Manganese	10		0.025	0.010	mg/L	1		6010B	TCLP	
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP	
Potassium	1.2	J	2.5	0.50	mg/L	1		6010B	TCLP	
Zinc	0.036	J	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	2.0		0.025	0.010	mg/L	1		6010B	SPLP East	
Mercury	0.033		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA	
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA	

**Client Sample ID: 2490V2-2-B02 (0-3)**

**Lab Sample ID: 500-141818-6**

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B02 (0-3) (Continued)**

**Lab Sample ID: 500-141818-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.0070	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.12		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.25		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.099		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.094		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.17		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.27		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0063	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.082		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.25		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.3		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	50		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.28	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	36		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	480		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1800		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1900		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0036	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	260		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	8.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	3.4		2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.064	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.30		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.018	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141818-5	2490V2-2-B01 (0-3)	Solid	03/06/18 14:35	03/07/18 09:23
500-141818-6	2490V2-2-B02 (0-3)	Solid	03/06/18 14:20	03/07/18 09:23

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B01 (0-3)**

**Lab Sample ID: 500-141818-5**

Date Collected: 03/06/18 14:35

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 84.1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.028</b>		0.016	0.0071	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
<b>2-Butanone (MEK)</b>	<b>0.0039 J</b>		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/09/18 17:33	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/09/18 17:33	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/09/18 17:33	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/09/18 17:33	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Acenaphthylene</b>	<b>0.0055 J</b>		0.038	0.0050	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Anthracene</b>	<b>0.015 J</b>		0.038	0.0064	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Benzo[a]anthracene</b>	<b>0.10</b>		0.038	0.0051	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B01 (0-3)**

**Lab Sample ID: 500-141818-5**

**Date Collected: 03/06/18 14:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.17</b>		0.038	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Benzo[b]fluoranthene</b>	<b>0.25</b>		0.038	0.0083	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Benzo[g,h,i]perylene</b>	<b>0.10</b>		0.038	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Benzo[k]fluoranthene</b>	<b>0.12</b>		0.038	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Chrysene</b>	<b>0.15</b>		0.038	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Dibenz(a,h)anthracene</b>	<b>0.028 J</b>		0.038	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4-Dinitrophenol	<0.77 *		0.77	0.67	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Fluoranthene</b>	<b>0.26</b>		0.038	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.096</b>		0.038	0.0099	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B01 (0-3)**

**Lab Sample ID: 500-141818-5**

**Date Collected: 03/06/18 14:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Phenanthrene</b>	<b>0.073</b>		0.038	0.0053	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
<b>Pyrene</b>	<b>0.18</b>		0.038	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		44 - 121	03/08/18 16:50	03/09/18 18:50	1
2-Fluorophenol	93		46 - 133	03/08/18 16:50	03/09/18 18:50	1
Nitrobenzene-d5	88		41 - 120	03/08/18 16:50	03/09/18 18:50	1
Phenol-d5	85		46 - 125	03/08/18 16:50	03/09/18 18:50	1
Terphenyl-d14	84		35 - 160	03/08/18 16:50	03/09/18 18:50	1
2,4,6-Tribromophenol	131		25 - 139	03/08/18 16:50	03/09/18 18:50	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Arsenic</b>	<b>5.6</b>		0.54	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Barium</b>	<b>81</b>		0.54	0.062	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Beryllium</b>	<b>0.70</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Chromium</b>	<b>19</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Cobalt</b>	<b>10</b>		0.27	0.071	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Copper</b>	<b>20</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Iron</b>	<b>18000</b>		11	5.6	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Lead</b>	<b>27</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Magnesium</b>	<b>12000</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Calcium</b>	<b>18000</b>	<b>B</b>	11	1.8	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Manganese</b>	<b>390</b>		0.54	0.079	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Nickel</b>	<b>21</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Selenium</b>	<b>0.88</b>		0.54	0.32	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Vanadium</b>	<b>27</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Zinc</b>	<b>55</b>		1.1	0.48	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Potassium</b>	<b>1600</b>		27	9.6	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1
<b>Sodium</b>	<b>1700</b>		54	8.0	mg/Kg	☼	03/08/18 17:17	03/09/18 16:52	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
<b>Barium</b>	<b>0.55</b>		0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:35	1
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:35	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B01 (0-3)**

**Lab Sample ID: 500-141818-5**

Date Collected: 03/06/18 14:35

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 84.1

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	290		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:35	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Cobalt	0.029		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Copper	0.011	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:35	1
Magnesium	110		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:35	1
Manganese	10		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Nickel	0.019	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Potassium	1.2	J	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:35	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:35	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:35	1
Zinc	0.036	J	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:35	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.0		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:51	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:42	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:08	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.018	0.0059	mg/Kg	☼	03/09/18 15:15	03/12/18 13:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:43	1
pH	8.1		0.20	0.20	SU			03/08/18 15:18	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B02 (0-3)**

**Lab Sample ID: 500-141818-6**

**Date Collected: 03/06/18 14:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,1,1,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/09/18 17:58	1
Dibromofluoromethane	94		75 - 126	03/07/18 16:00	03/09/18 17:58	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	03/07/18 16:00	03/09/18 17:58	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/09/18 17:58	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0070	J	0.038	0.0068	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Anthracene	0.021	J	0.038	0.0064	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Benzo[a]anthracene	0.12		0.038	0.0051	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B02 (0-3)**

**Lab Sample ID: 500-141818-6**

**Date Collected: 03/06/18 14:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.16</b>		0.038	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Benzo[b]fluoranthene</b>	<b>0.25</b>		0.038	0.0082	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Benzo[g,h,i]perylene</b>	<b>0.099</b>		0.038	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Benzo[k]fluoranthene</b>	<b>0.094</b>		0.038	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Chrysene</b>	<b>0.17</b>		0.038	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Fluoranthene</b>	<b>0.27</b>		0.038	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Fluorene</b>	<b>0.0063 J</b>		0.038	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.082</b>		0.038	0.0099	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B02 (0-3)**

**Lab Sample ID: 500-141818-6**

Date Collected: 03/06/18 14:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 84.3

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Phenanthrene</b>	<b>0.13</b>		0.038	0.0053	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
<b>Pyrene</b>	<b>0.25</b>		0.038	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		44 - 121	03/08/18 16:50	03/09/18 19:16	1
2-Fluorophenol	89		46 - 133	03/08/18 16:50	03/09/18 19:16	1
Nitrobenzene-d5	82		41 - 120	03/08/18 16:50	03/09/18 19:16	1
Phenol-d5	87		46 - 125	03/08/18 16:50	03/09/18 19:16	1
Terphenyl-d14	78		35 - 160	03/08/18 16:50	03/09/18 19:16	1
2,4,6-Tribromophenol	126		25 - 139	03/08/18 16:50	03/09/18 19:16	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Arsenic</b>	<b>6.3</b>		0.57	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Barium</b>	<b>50</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Beryllium</b>	<b>0.69</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Cadmium</b>	<b>0.16</b>	<b>B</b>	0.11	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Chromium</b>	<b>18</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Cobalt</b>	<b>11</b>		0.28	0.075	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Copper</b>	<b>20</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Iron</b>	<b>20000</b>		11	5.9	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Lead</b>	<b>36</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Magnesium</b>	<b>12000</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Calcium</b>	<b>16000</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Manganese</b>	<b>480</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Nickel</b>	<b>24</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Selenium</b>	<b>0.70</b>		0.57	0.34	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
Silver	<0.28		0.28	0.074	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Vanadium</b>	<b>25</b>		0.28	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Zinc</b>	<b>64</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Potassium</b>	<b>1800</b>		28	10	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1
<b>Sodium</b>	<b>1900</b>		57	8.4	mg/Kg	☼	03/08/18 17:17	03/09/18 16:56	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
<b>Barium</b>	<b>0.45</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:39	1
<b>Cadmium</b>	<b>0.0036</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:39	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

**Client Sample ID: 2490V2-2-B02 (0-3)**

**Lab Sample ID: 500-141818-6**

Date Collected: 03/06/18 14:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 84.3

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	260		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:39	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Cobalt	0.048		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Copper	0.014	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:39	1
Lead	0.016		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:39	1
Magnesium	110		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:39	1
Manganese	8.7		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Nickel	0.021	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Potassium	3.4		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:39	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:39	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:39	1
Zinc	0.064	J	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:39	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30		0.0075	0.0075	mg/L		03/13/18 06:45	03/14/18 02:56	1
Manganese	1.1		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:56	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:43	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:09	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.018	0.0062	mg/Kg	☼	03/09/18 15:15	03/12/18 13:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	03/08/18 15:20	03/09/18 15:43	1
pH	8.1		0.20	0.20	SU			03/08/18 15:20	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-3

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To: Matt Weiss (optional)  
Contact: Matt Weiss  
Company: Terracon  
Address: 135 Ambassador Dr.  
Address: Naperville IL  
Phone: 630-445-0160  
Fax:  
E-Mail: matt.weiss@terracon.com

Bill To: (optional)  
Contact:  
Company:  
Address:  
Address:  
Phone:  
Fax:  
PO#/Reference#

## Chain of Custody Record

Lab Job #: 500-14818  
Chain of Custody Number: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 26, 29, 31

Client		Client Project #		Preservative		Parameter										Preservative Key			
Terracon		1187007B														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other			
Project Name				Project Location/State				Lab Project #				Lab PM							
Work Order # 45				Crystal Lake IL															
Sampler				Sample ID				Sampling		# of Containers		Matrix						Comments	
Ryan J Peterson						Date Time													
Lab ID	MS/MSD	Sample ID		Date	Time	# of Containers	Matrix												
5		2490V2-2-301(O-3)		3/6	1435	5	S	VOCs											
6		2490V2-2-302(O-3)		3/6	1420	5	S	SVOCs											
								Total TAL											
								23 Inorg.											
								TCLPTAC											
								23 Inorg.											
								pH											
								SPLP TAL											
								23 Inorg.											



Turnaround Time Required (Business Days):  1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
 Requested Due Date: \_\_\_\_\_  
 Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>830</u>	Received By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0830</u>	Shipped: _____
Relinquished By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0923</u>	Received By: <u>[Signature]</u> Company: <u>TERRA</u> Date: <u>03/07/18</u> Time: <u>0923</u>	Hand Delivered: _____

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
\* No AL  
\* Hold SPLP

Lab Comments:

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141818-3

**Login Number: 141818**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6, 2.9, 3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

IL Route 176, Haligus Rd, and Mt. Thabor Rd IDOT Stationing as noted in PSI Report

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.



Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Soil from borings B01 through B06 and B08 through B31 were sampled adjacent to ISGS Site No 2490V2-3. See Exhibits 2, 3, 4, and 5 and Table 5 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141817-1, J141878-2, and J141780-1. Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

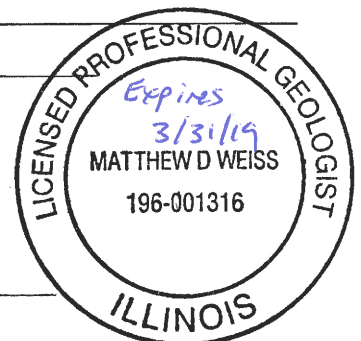
Matt Weiss  
 Printed Name:

[Signature]

10/12/18

Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:

Date:



P.E. or L.P.G. Seal:

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B01 (0-5)	2490V2-3-B02 (0-5)	2490V2-3-B03 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/7/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0017	<0.0016	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0017	<0.0016	<0.0016
Acetone	mg/kg	---	---	25		<0.017	<0.016	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0017	<0.0016	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0017	<0.0016	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0042	<0.0041	<0.0039
2-Butanone	mg/kg	---	---	17		<0.0042	<0.0041	<0.0039
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0017	<0.0016	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037	<0.039
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037	<0.039
Anthracene	mg/kg	0.25	0.4	12000		<0.037	0.0077	<0.039
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.024	0.037	0.0098
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.055	0.063	0.034
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.057	0.072	0.023
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.033	0.035	0.044
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.018	0.029	<0.039
Chrysene	mg/kg	1.2	2.7	88		0.034	0.041	0.02
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.028	0.028	<0.039
Fluoranthene	mg/kg	2.7	4.1	3100		0.05	0.1	0.02
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.037	<0.039
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.033	0.039	0.016
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.037	<0.039
Phenanthrene	mg/kg	1.3	2.5	210		0.025	0.064	0.0087
Pyrene	mg/kg	1.9	3.0	2300		0.049	0.077	0.018
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.20
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.075	<0.080
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		4.1	5.3	7
Barium	mg/kg	---	110	1500		45	30	61
Cadmium	mg/kg	---	0.6	5.2		0.17	0.12	0.046
Chromium, total	mg/kg	---	16.2	21		13	14	22
Lead	mg/kg	---	36	107		40	17	29
Mercury	mg/kg	---	0.06	0.1		0.025	0.015	0.026
Selenium	mg/kg	---	0.48	1.3		0.63	<0.52	0.4
Silver	mg/kg	---	0.55	4.4		<0.28	<0.26	<0.29
Antimony	mg/kg	---	4.0	5		<1.1	<1.0	<1.1
Beryllium	mg/kg	---	0.59	22		0.42	0.54	0.85
Calcium	mg/kg	---	9,300	---		18000	95000	5100
Cobalt	mg/kg	---	8.9	20		9.3	9.3	14
Copper	mg/kg	---	19.6	2900		14	18	23
Cyanide	mg/kg	---	0.51	---		<0.54	<0.49	<0.60
Iron	mg/kg	---	15,900	15000		13000	14000	23000
Magnesium	mg/kg	---	4,820	325000		11000	38000	5600
Manganese	mg/kg	---	636	630		620	340	500
Nickel	mg/kg	---	18	100		15	21	41
Potassium	mg/kg	---	1,268	---		800	1700	1900
Sodium	mg/kg	---	130	---		1100	1200	1300
Thallium	mg/kg	---	0.32	2.6		<0.56	<0.52	<0.57
Vanadium	mg/kg	---	25.2	550		20	18	25
Zinc	mg/kg	---	95	5100		48	42	67
pH			6.25	9		8	8.5	8.1

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B01 (0-5)	2490V2-3-B02 (0-5)	2490V2-3-B03 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/7/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		0.18	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.63	1.4	2.2
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.6	0.27	0.36
Cadmium,TCLP	mg/L	---	---	---		0.0043	0.0025	0.0026
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		0.06	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		220	570	190
Cobalt,TCLP	mg/L	---	---	---		0.086	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		0.013	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		3.8	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		87	130	90
Manganese,TCLP	mg/L	---	---	---		17	0.7	2.1
Nickel,TCLP	mg/L	---	---	---		0.048	0.011	0.028
Potassium,TCLP	mg/L	---	---	---		0.84	0.68	1.2
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.22	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B04 (0-5)	2490V2-3-B05 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5
		Chicago	MSAs	mg/kg	Date Collected	3/7/2018	3/7/2018
				pH 6.25-9.0			
<b>Volatile Organic Analytical Parameters</b>							
Toluene	mg/kg	---	---	12		<0.0018	<0.0015
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0018	<0.0015
Acetone	mg/kg	---	---	25		<0.018	<0.015
Bromodichloromethane	mg/kg	---	---	0.6		<0.0018	<0.0015
Bromoform	mg/kg	---	---	0.8		<0.0018	<0.0015
Bromomethane	mg/kg	---	---	0.2		<0.0046	<0.0037
2-Butanone	mg/kg	---	---	17		<0.0046	<0.0037
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0018	<0.0015
<b>Semivolatile Organic Analytical Parameters</b>							
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037
Anthracene	mg/kg	0.25	0.4	12000		<0.037	0.0072
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.012	0.042
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.013	0.065
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.016	0.1
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.013	0.047
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	0.037
Chrysene	mg/kg	1.2	2.7	88		0.014	0.063
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	0.01
Fluoranthene	mg/kg	2.7	4.1	3100		0.023	0.14
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.011	0.045
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		0.013	0.061
Pyrene	mg/kg	1.9	3.0	2300		0.021	0.082
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		0.31	<0.18
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.074
<b>Inorganic Analytical Parameters</b>							
Arsenic	mg/kg	---	13	11.3		6	5.4
Barium	mg/kg	---	110	1500		56	39
Cadmium	mg/kg	---	0.6	5.2		0.12	0.15
Chromium, total	mg/kg	---	16.2	21		18	14
Lead	mg/kg	---	36	107		24	19
Mercury	mg/kg	---	0.06	0.1		0.024	0.015
Selenium	mg/kg	---	0.48	1.3		0.84	0.68
Silver	mg/kg	---	0.55	4.4		<0.28	<0.27
Antimony	mg/kg	---	4.0	5		<1.1	<1.1
Beryllium	mg/kg	---	0.59	22		0.64	0.59
Calcium	mg/kg	---	9,300	---		8200	76000
Cobalt	mg/kg	---	8.9	20		13	9.3
Copper	mg/kg	---	19.6	2900		17	19
Cyanide	mg/kg	---	0.51	---		<0.58	<0.57
Iron	mg/kg	---	15,900	15000		19000	16000
Magnesium	mg/kg	---	4,820	325000		6700	28000
Manganese	mg/kg	---	636	630		570	400
Nickel	mg/kg	---	18	100		20	22
Potassium	mg/kg	---	1,268	---		1400	1600
Sodium	mg/kg	---	130	---		2200	2200
Thallium	mg/kg	---	0.32	2.6		<0.56	<0.53
Vanadium	mg/kg	---	25.2	550		24	20
Zinc	mg/kg	---	95	5100		50	48
pH			6.25	9		8.2	8.5

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B04 (0-5)	2490V2-3-B05 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5
				mg/kg	Date Collected	3/7/2018	3/7/2018
				pH 6.25-9.0			
<b>Inorganic Analytical Parameters (SPLP)</b>							
Antimony,SPLP	mg/L	---	---	---		-	-
Arsenic,SPLP	mg/L	---	---	---		--	--
Barium,SPLP	mg/L	---	---	---		--	--
Beryllium,SPLP	mg/L	---	---	---		--	--
Cadmium,SPLP	mg/L	---	---	---		--	--
Calcium,SPLP	mg/L	---	---	---		--	--
Chromium,SPLP	mg/L	---	---	---		--	--
Cobalt,SPLP	mg/L	---	---	---		--	--
Copper,SPLP	mg/L	---	---	---		--	--
Iron,SPLP	mg/L	---	---	---		--	--
Lead,SPLP	mg/L	---	---	---		--	--
Magnesium,SPLP	mg/L	---	---	---		--	--
Manganese,SPLP	mg/L	---	---	---		1.7	1.5
Mercury,SPLP	mg/L	---	---	---		--	--
Nickel,SPLP	mg/L	---	---	---		--	--
Potassium,SPLP	mg/L	---	---	---		--	--
Selenium,SPLP	mg/L	---	---	---		--	--
Silver,SPLP	mg/L	---	---	---		--	--
Sodium,SPLP	mg/L	---	---	---		--	--
Thallium,SPLP	mg/L	---	---	---		--	--
Vanadium,SPLP	mg/L	---	---	---		--	--
Zinc,SPLP	mg/L	---	---	---		--	--
Cyanide,SPLP	mg/L	---	---	---		--	--
<b>Inorganic Analytical Parameters (TCLP)</b>							
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.28	0.29
Cadmium,TCLP	mg/L	---	---	---		0.0024	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		270	480
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--
Iron,TCLP	mg/L	---	---	---		0.3	<0.40
Magnesium,TCLP	mg/L	---	---	---		120	77
Manganese,TCLP	mg/L	---	---	---		0.76	0.22
Nickel,TCLP	mg/L	---	---	---		<0.025	<0.025
Potassium,TCLP	mg/L	---	---	---		0.71	0.72
Sodium,TCLP	mg/L	---	---	---		--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B06 (0-5)	2490V2-3-B06 DUP (0-5)	2490V2-3-B06 (5-10)
				CCDD	Sample Depth (feet)	0-5	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		0.0011	0.0012	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0016	<0.0016
Acetone	mg/kg	---	---	25		0.035	0.025	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0016	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0016	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0040	<0.0041	<0.0040
2-Butanone	mg/kg	---	---	17		0.0078	0.0056	<0.0040
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	<0.0016	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037	<0.037
Anthracene	mg/kg	0.25	0.4	12000		0.014	<0.037	<0.037
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.096	0.024	<0.037
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.15	0.052	<0.037
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.28	0.061	<0.037
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.081	0.034	0.026
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.1	0.02	<0.037
Chrysene	mg/kg	1.2	2.7	88		0.13	0.031	0.013
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.036	<0.037	<0.037
Fluoranthene	mg/kg	2.7	4.1	3100		0.24	0.048	<0.037
Fluorene	mg/kg	0.1	0.18	560		0.0053	<0.037	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.071	0.037	<0.037
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.037	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		0.1	0.013	0.013
Pyrene	mg/kg	1.9	3.0	2300		0.25	0.04	0.0096
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.075	<0.076
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.1	2.5	4.6
Barium	mg/kg	---	110	1500		39	40	28
Cadmium	mg/kg	---	0.6	5.2		0.15	0.084	0.061
Chromium, total	mg/kg	---	16.2	21		13	17	14
Lead	mg/kg	---	36	107		22	16	9.5
Mercury	mg/kg	---	0.06	0.1		0.02	0.017	0.012
Selenium	mg/kg	---	0.48	1.3		0.38	<0.55	<0.57
Silver	mg/kg	---	0.55	4.4		<0.28	<0.27	<0.29
Antimony	mg/kg	---	4.0	5		0.3	<1.1	0.23
Beryllium	mg/kg	---	0.59	22		0.5	0.67	0.58
Calcium	mg/kg	---	9,300	---		56000	49000	100000
Cobalt	mg/kg	---	8.9	20		8.4	9.6	10
Copper	mg/kg	---	19.6	2900		16	14	16
Cyanide	mg/kg	---	0.51	---		<0.46	<0.53	<0.56
Iron	mg/kg	---	15,900	15000		14000	15000	17000
Magnesium	mg/kg	---	4,820	325000		21000	22000	33000
Manganese	mg/kg	---	636	630		340	190	340
Nickel	mg/kg	---	18	100		18	24	25
Potassium	mg/kg	---	1,268	---		1200	1600	2200
Sodium	mg/kg	---	130	---		1400	1400	580
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.55	<0.57
Vanadium	mg/kg	---	25.2	550		20	23	16
Zinc	mg/kg	---	95	5100		46	43	46
pH			6.25	9		8.2	8.2	7.9

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B06 (0-5)	2490V2-3-B06 DUP (0-5)	2490V2-3-B06 (5-10)
				CCDD	Sample Depth (feet)	0-5	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		0.18	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		1.3	1.7	0.29
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.4	0.4	0.49
Cadmium,TCLP	mg/L	---	---	---		0.002	0.0022	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		0.0091	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		440	370	960
Cobalt,TCLP	mg/L	---	---	---		0.013	0.012	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		110	160	48
Manganese,TCLP	mg/L	---	---	---		4.7	4.5	2.5
Nickel,TCLP	mg/L	---	---	---		0.012	<0.025	0.013
Potassium,TCLP	mg/L	---	---	---		0.82	0.69	2.8
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.036	0.022	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B06 (10-15)	2490V2-3-B07 (0-5)	2490V2-3-B07 (5-10)
				CCDD	Sample Depth (feet)	10-15	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0015	<0.0016	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0015	<0.0016	<0.0016
Acetone	mg/kg	---	---	25		<0.015	0.011	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0015	<0.0016	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0015	<0.0016	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0038	<0.0041	<0.0040
2-Butanone	mg/kg	---	---	17		<0.0038	<0.0041	<0.0040
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0015	<0.0016	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.038	<0.035	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.038	<0.035	<0.037
Anthracene	mg/kg	0.25	0.4	12000		<0.038	0.01	0.007
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.038	0.081	0.044
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.038	0.12	0.08
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.038	0.22	0.13
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.026	0.069	0.043
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.038	0.083	0.036
Chrysene	mg/kg	1.2	2.7	88		0.016	0.1	0.07
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.038	0.034	0.029
Fluoranthene	mg/kg	2.7	4.1	3100		<0.038	0.17	0.12
Fluorene	mg/kg	0.1	0.18	560		<0.038	<0.035	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.038	0.067	0.051
Naphthalene	mg/kg	0.04	0.2	1.8		<0.038	<0.035	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		0.027	0.059	0.054
Pyrene	mg/kg	1.9	3.0	2300		<0.038	0.2	0.11
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.18	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		0.0085	<0.072	<0.075
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		4.9	4.6	5.5
Barium	mg/kg	---	110	1500		28	51	26
Cadmium	mg/kg	---	0.6	5.2		0.096	0.14	0.078
Chromium, total	mg/kg	---	16.2	21		13	14	15
Lead	mg/kg	---	36	107		9.7	30	9.6
Mercury	mg/kg	---	0.06	0.1		0.013	0.014	0.018
Selenium	mg/kg	---	0.48	1.3		0.6	0.52	0.34
Silver	mg/kg	---	0.55	4.4		<0.27	<0.28	<0.28
Antimony	mg/kg	---	4.0	5		<1.1	<1.1	<1.1
Beryllium	mg/kg	---	0.59	22		0.54	0.53	0.59
Calcium	mg/kg	---	9,300	---		110000	52000	100000
Cobalt	mg/kg	---	8.9	20		10	8.2	7.3
Copper	mg/kg	---	19.6	2900		36	15	19
Cyanide	mg/kg	---	0.51	---		<0.54	<0.50	0.27
Iron	mg/kg	---	15,900	15000		16000	14000	17000
Magnesium	mg/kg	---	4,820	325000		35000	21000	32000
Manganese	mg/kg	---	636	630		360	500	280
Nickel	mg/kg	---	18	100		24	18	23
Potassium	mg/kg	---	1,268	---		2200	1200	2100
Sodium	mg/kg	---	130	---		180	1700	370
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.56	<0.55
Vanadium	mg/kg	---	25.2	550		15	22	17
Zinc	mg/kg	---	95	5100		42	47	47
pH			6.25	9		7.8	8.3	7.9



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B06 (10-15)	2490V2-3-B07 (0-5)	2490V2-3-B07 (5-10)
				CCDD	Sample Depth (feet)	10-15	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		pH 6.25-9.0						
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	0.24	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.033	1.8	0.59
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.53	0.49	0.25
Cadmium,TCLP	mg/L	---	---	---		<0.0050	0.0031	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	0.01	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		840	350	870
Cobalt,TCLP	mg/L	---	---	---		0.02	0.033	<0.025
Copper,TCLP	mg/L	---	---	---		0.01	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		36	110	42
Manganese,TCLP	mg/L	---	---	---		2	10	1
Nickel,TCLP	mg/L	---	---	---		0.052	0.02	<0.025
Potassium,TCLP	mg/L	---	---	---		4.5	0.79	1.9
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.032	0.022

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B07 (10-15)	2490V2-3-B08 (0-5)	2490V2-3-B09 (0-5)
				CCDD	Sample Depth (feet)	10-15	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0015	<0.0016	<0.0015
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0015	<0.0016	<0.0015
Acetone	mg/kg	---	---	25		0.008	<0.016	0.028
Bromodichloromethane	mg/kg	---	---	0.6		<0.0015	<0.0016	<0.0015
Bromoform	mg/kg	---	---	0.8		<0.0015	<0.0016	<0.0015
Bromomethane	mg/kg	---	---	0.2		<0.0037	<0.0040	<0.0038
2-Butanone	mg/kg	---	---	17		<0.0037	<0.0040	0.0049
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0015	0.00098	<0.0015
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037	<0.038
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037	<0.038
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.037	<0.038
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.037	0.011	0.047
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.024	0.033	0.078
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.037	0.024	0.11
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.027	0.022	0.044
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	0.011	0.046
Chrysene	mg/kg	1.2	2.7	88		<0.037	0.016	0.061
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.037	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		<0.037	0.029	0.11
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.037	<0.038
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	0.029	0.046
Naphthalene	mg/kg	0.04	0.2	1.8		0.0073	<0.037	<0.038
Phenanthrene	mg/kg	1.3	2.5	210		0.044	0.017	0.043
Pyrene	mg/kg	1.9	3.0	2300		0.012	0.022	0.097
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		0.039	<0.076	<0.078
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		4.6	5.5	5.3
Barium	mg/kg	---	110	1500		25	54	41
Cadmium	mg/kg	---	0.6	5.2		0.088	0.048	0.13
Chromium, total	mg/kg	---	16.2	21		12	14	13
Lead	mg/kg	---	36	107		9.6	11	21
Mercury	mg/kg	---	0.06	0.1		0.016	0.039	0.018
Selenium	mg/kg	---	0.48	1.3		<0.54	<0.57	0.41
Silver	mg/kg	---	0.55	4.4		<0.27	<0.29	<0.28
Antimony	mg/kg	---	4.0	5		<1.1	0.22	<1.1
Beryllium	mg/kg	---	0.59	22		0.48	0.55	0.52
Calcium	mg/kg	---	9,300	---		110000	14000	65000
Cobalt	mg/kg	---	8.9	20		11	8	8.5
Copper	mg/kg	---	19.6	2900		18	12	17
Cyanide	mg/kg	---	0.51	---		<0.51	<0.53	<0.53
Iron	mg/kg	---	15,900	15000		14000	16000	15000
Magnesium	mg/kg	---	4,820	325000		41000	8300	22000
Manganese	mg/kg	---	636	630		350	450	320
Nickel	mg/kg	---	18	100		25	14	20
Potassium	mg/kg	---	1,268	---		1900	760	1200
Sodium	mg/kg	---	130	---		160	1600	1600
Thallium	mg/kg	---	0.32	2.6		<0.54	<0.57	<0.57
Vanadium	mg/kg	---	25.2	550		14	24	21
Zinc	mg/kg	---	95	5100		45	39	50
pH			6.25	9		7.9	8.3	8.6

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B07 (10-15)	2490V2-3-B08 (0-5)	2490V2-3-B09 (0-5)
				CCDD	Sample Depth (feet)	10-15	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.11	1.6	2.5
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.56	0.38	0.32
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	0.0026
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		730	360	390
Cobalt,TCLP	mg/L	---	---	---		0.041	<0.025	0.03
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		49	110	83
Manganese,TCLP	mg/L	---	---	---		2.3	1.1	6.1
Nickel,TCLP	mg/L	---	---	---		0.084	<0.025	0.02
Potassium,TCLP	mg/L	---	---	---		4.4	0.51	0.8
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B10 (0-5)	2490V2-3-B11 (0-5)	2490V2-3-B11 (5-10)
				CCDD	Sample Depth (feet)	0-5	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0015	<0.0018	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0015	<0.0018	<0.0016
Acetone	mg/kg	---	---	25		0.017	<0.018	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0015	<0.0018	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0015	<0.0018	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0038	<0.0045	<0.0039
2-Butanone	mg/kg	---	---	17		0.0031	<0.0045	<0.0039
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0015	<0.0018	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.039	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.039	<0.037
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.039	<0.037
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.037	<0.039	<0.037
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.037	0.024	<0.037
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.037	<0.039	<0.037
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.016	0.018	0.024
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	<0.039	<0.037
Chrysene	mg/kg	1.2	2.7	88		<0.037	<0.039	<0.037
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.039	<0.037
Fluoranthene	mg/kg	2.7	4.1	3100		<0.037	<0.039	<0.037
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.039	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	<0.039	<0.037
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.039	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		<0.037	<0.039	<0.037
Pyrene	mg/kg	1.9	3.0	2300		<0.037	<0.039	0.0075
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.20	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.078	<0.076
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		4.9	6.4	5.6
Barium	mg/kg	---	110	1500		26	54	28
Cadmium	mg/kg	---	0.6	5.2		0.77	0.047	0.085
Chromium, total	mg/kg	---	16.2	21		13	19	14
Lead	mg/kg	---	36	107		22	14	9.2
Mercury	mg/kg	---	0.06	0.1		0.015	0.031	0.013
Selenium	mg/kg	---	0.48	1.3		<0.55	0.75	0.58
Silver	mg/kg	---	0.55	4.4		<0.28	<0.29	<0.29
Antimony	mg/kg	---	4.0	5		<1.1	<1.2	<1.1
Beryllium	mg/kg	---	0.59	22		0.52	0.83	0.57
Calcium	mg/kg	---	9,300	---		110000	15000	95000
Cobalt	mg/kg	---	8.9	20		9.2	11	10
Copper	mg/kg	---	19.6	2900		20	18	18
Cyanide	mg/kg	---	0.51	---		0.34	<0.60	<0.54
Iron	mg/kg	---	15,900	15000		15000	21000	16000
Magnesium	mg/kg	---	4,820	325000		36000	10000	33000
Manganese	mg/kg	---	636	630		330	400	320
Nickel	mg/kg	---	18	100		22	33	25
Potassium	mg/kg	---	1,268	---		1600	1300	2300
Sodium	mg/kg	---	130	---		1100	3000	560
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.58	<0.57
Vanadium	mg/kg	---	25.2	550		18	22	18
Zinc	mg/kg	---	95	5100		54	53	46
pH			6.25	9		8.4	8.4	7.9

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B10 (0-5)	2490V2-3-B11 (0-5)	2490V2-3-B11 (5-10)
				CCDD	Sample Depth (feet)	0-5	0-5	5-10
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		2.3	1.3	0.27
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.31	0.27	0.25
Cadmium,TCLP	mg/L	---	---	---		0.003	0.0021	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		450	420	740
Cobalt,TCLP	mg/L	---	---	---		0.024	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		86	110	43
Manganese,TCLP	mg/L	---	---	---		4.5	0.57	1.4
Nickel,TCLP	mg/L	---	---	---		0.019	<0.025	<0.025
Potassium,TCLP	mg/L	---	---	---		1.1	0.93	1.7
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B11 DUP (5-10)	2490V2-3-B11 (10-15)	2490V2-3-B12 (0-5)
				CCDD	Sample Depth (feet)	5-10	10-15	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0016	<0.0014	<0.0017
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0014	<0.0017
Acetone	mg/kg	---	---	25		<0.016	<0.014	0.013
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0014	<0.0017
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0014	<0.0017
Bromomethane	mg/kg	---	---	0.2		<0.0039	<0.0036	<0.0042
2-Butanone	mg/kg	---	---	17		<0.0039	<0.0036	<0.0042
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	0.0011	<0.0017
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037	<0.037
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.037	<0.037
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.037	<0.037	0.023
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.037	<0.037	0.026
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.037	<0.037	0.042
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.025	0.025	0.023
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	<0.037	<0.037
Chrysene	mg/kg	1.2	2.7	88		0.012	0.019	0.031
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.037	<0.037
Fluoranthene	mg/kg	2.7	4.1	3100		<0.037	<0.037	0.046
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.037	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	<0.037	0.016
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	0.0085	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		0.0059	0.044	0.023
Pyrene	mg/kg	1.9	3.0	2300		0.01	<0.037	0.042
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.076	0.038	<0.074
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		4.3	6.7	6.3
Barium	mg/kg	---	110	1500		23	26	53
Cadmium	mg/kg	---	0.6	5.2		0.078	0.1	0.058
Chromium, total	mg/kg	---	16.2	21		12	13	16
Lead	mg/kg	---	36	107		6.2	11	52
Mercury	mg/kg	---	0.06	0.1		0.011	0.013	0.024
Selenium	mg/kg	---	0.48	1.3		<0.55	0.44	0.52
Silver	mg/kg	---	0.55	4.4		<0.27	<0.27	<0.28
Antimony	mg/kg	---	4.0	5		<1.1	<1.1	<1.1
Beryllium	mg/kg	---	0.59	22		0.5	0.59	0.59
Calcium	mg/kg	---	9,300	---		180000	100000	62000
Cobalt	mg/kg	---	8.9	20		6.7	10	12
Copper	mg/kg	---	19.6	2900		15	19	22
Cyanide	mg/kg	---	0.51	---		<0.49	<0.56	<0.47
Iron	mg/kg	---	15,900	15000		13000	18000	17000
Magnesium	mg/kg	---	4,820	325000		31000	35000	22000
Manganese	mg/kg	---	636	630		270	360	440
Nickel	mg/kg	---	18	100		21	26	26
Potassium	mg/kg	---	1,268	---		2100	2300	1800
Sodium	mg/kg	---	130	---		560	170	1900
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.54	<0.56
Vanadium	mg/kg	---	25.2	550		15	16	21
Zinc	mg/kg	---	95	5100		40	42	64
pH			6.25	9		7.9	7.9	8.6

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B11 DUP (5-10)	2490V2-3-B11 (10-15)	2490V2-3-B12 (0-5)
				CCDD	Sample Depth (feet)	5-10	10-15	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.33	0.049	--
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.27	0.41	0.44
Cadmium,TCLP	mg/L	---	---	---		0.0022	<0.0050	0.002
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		820	680	560
Cobalt,TCLP	mg/L	---	---	---		<0.025	0.015	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	0.011	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	0.29
Magnesium,TCLP	mg/L	---	---	---		45	45	36
Manganese,TCLP	mg/L	---	---	---		1.6	2	0.079
Nickel,TCLP	mg/L	---	---	---		0.01	0.043	0.013
Potassium,TCLP	mg/L	---	---	---		2.1	4.5	1.9
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.043	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B12 (5-10)	2490V2-3-B12 (10-15)	2490V2-3-B13 (0-5)
				CCDD	Sample Depth (feet)	5-10	10-15	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0015	<0.0014	<0.0015
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0015	<0.0014	<0.0015
Acetone	mg/kg	---	---	25		0.011	0.016	0.024
Bromodichloromethane	mg/kg	---	---	0.6		<0.0015	<0.0014	<0.0015
Bromoform	mg/kg	---	---	0.8		<0.0015	<0.0014	<0.0015
Bromomethane	mg/kg	---	---	0.2		<0.0038	<0.0035	<0.0038
2-Butanone	mg/kg	---	---	17		<0.0038	<0.0035	<0.0038
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0015	0.00072	<0.0015
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.038	<0.037	0.011
Acenaphthylene	mg/kg	0.03	0.07	85		<0.038	<0.037	0.0086
Anthracene	mg/kg	0.25	0.4	12000		<0.038	<0.037	0.052
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.038	0.0082	0.32
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.038	<0.037	0.43
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.038	<0.037	0.74
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.038	0.021	0.23
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.038	<0.037	0.27
Chrysene	mg/kg	1.2	2.7	88		0.013	0.021	0.43
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.038	<0.037	0.043
Fluoranthene	mg/kg	2.7	4.1	3100		<0.038	0.014	0.89
Fluorene	mg/kg	0.1	0.18	560		<0.038	<0.037	0.013
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.038	<0.037	0.21
Naphthalene	mg/kg	0.04	0.2	1.8		<0.038	<0.037	<0.036
Phenanthrene	mg/kg	1.3	2.5	210		0.019	0.024	0.27
Pyrene	mg/kg	1.9	3.0	2300		<0.038	0.015	0.53
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.18
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.076	0.0093	<0.073
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5	6.8	4.4
Barium	mg/kg	---	110	1500		28	23	27
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.11	0.12
Chromium, total	mg/kg	---	16.2	21		15	14	12
Lead	mg/kg	---	36	107		11	13	44
Mercury	mg/kg	---	0.06	0.1		0.024	0.013	0.015
Selenium	mg/kg	---	0.48	1.3		<0.54	0.68	0.37
Silver	mg/kg	---	0.55	4.4		<0.27	<0.28	<0.26
Antimony	mg/kg	---	4.0	5		0.36	0.28	0.35
Beryllium	mg/kg	---	0.59	22		0.54	0.53	0.3
Calcium	mg/kg	---	9,300	---		94000	100000	120000
Cobalt	mg/kg	---	8.9	20		9.4	12	5.8
Copper	mg/kg	---	19.6	2900		20	22	17
Cyanide	mg/kg	---	0.51	---		<0.55	<0.48	<0.53
Iron	mg/kg	---	15,900	15000		16000	16000	11000
Magnesium	mg/kg	---	4,820	325000		36000	37000	48000
Manganese	mg/kg	---	636	630		370	330	320
Nickel	mg/kg	---	18	100		27	28	14
Potassium	mg/kg	---	1,268	---		2500	2500	880
Sodium	mg/kg	---	130	---		330	210	780
Thallium	mg/kg	---	0.32	2.6		<0.54	<0.56	<0.52
Vanadium	mg/kg	---	25.2	550		17	16	15
Zinc	mg/kg	---	95	5100		48	53	49
pH			6.25	9		7.6	7.6	8.4



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B12 (5-10)	2490V2-3-B12 (10-15)	2490V2-3-B13 (0-5)
				CCDD	Sample Depth (feet)	5-10	10-15	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	0.22
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.59	0.063	1.1
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.21	0.34	0.36
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	0.0033
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	0.013
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		840	730	430
Cobalt,TCLP	mg/L	---	---	---		<0.025	0.021	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.32	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		41	31	91
Manganese,TCLP	mg/L	---	---	---		1	1.8	3
Nickel,TCLP	mg/L	---	---	---		0.013	0.058	0.017
Potassium,TCLP	mg/L	---	---	---		3.1	4.9	1.6
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.024	0.058	0.036

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B14 (0-5)	2490V2-3-B15 (0-5)	2490V2-3-B16 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/6/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0016	<0.0015	<0.0015
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0015	<0.0015
Acetone	mg/kg	---	---	25		<0.016	<0.015	0.011
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0015	<0.0015
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0015	<0.0015
Bromomethane	mg/kg	---	---	0.2		<0.0040	<0.0037	<0.0038
2-Butanone	mg/kg	---	---	17		<0.0040	<0.0037	<0.0038
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	<0.0015	<0.0015
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.039	0.0083	<0.038
Acenaphthylene	mg/kg	0.03	0.07	85		<0.039	<0.037	<0.038
Anthracene	mg/kg	0.25	0.4	12000		<0.039	0.024	<0.038
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.01	0.12	<0.038
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.013	0.16	0.025
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.018	0.25	<0.038
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.014	0.094	0.017
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.039	0.089	<0.038
Chrysene	mg/kg	1.2	2.7	88		0.013	0.16	<0.038
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.039	<0.037	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		0.025	0.4	<0.038
Fluorene	mg/kg	0.1	0.18	560		<0.039	0.011	<0.038
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.014	0.087	<0.038
Naphthalene	mg/kg	0.04	0.2	1.8		<0.039	<0.037	<0.038
Phenanthrene	mg/kg	1.3	2.5	210		0.011	0.18	<0.038
Pyrene	mg/kg	1.9	3.0	2300		0.016	0.22	<0.038
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.078	<0.075	<0.077
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.6	5.9	6.7
Barium	mg/kg	---	110	1500		39	33	44
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.11	<0.11
Chromium, total	mg/kg	---	16.2	21		14	15	21
Lead	mg/kg	---	36	107		17	12	14
Mercury	mg/kg	---	0.06	0.1		0.019	0.016	0.034
Selenium	mg/kg	---	0.48	1.3		0.62	0.59	0.87
Silver	mg/kg	---	0.55	4.4		<0.28	<0.27	<0.27
Antimony	mg/kg	---	4.0	5		0.22	0.33	<1.1
Beryllium	mg/kg	---	0.59	22		0.52	0.53	0.82
Calcium	mg/kg	---	9,300	---		33000	91000	11000
Cobalt	mg/kg	---	8.9	20		9.3	9.3	12
Copper	mg/kg	---	19.6	2900		20	18	22
Cyanide	mg/kg	---	0.51	---		<0.53	<0.45	<0.58
Iron	mg/kg	---	15,900	15000		16000	16000	23000
Magnesium	mg/kg	---	4,820	325000		21000	33000	8500
Manganese	mg/kg	---	636	630		370	320	220
Nickel	mg/kg	---	18	100		23	23	30
Potassium	mg/kg	---	1,268	---		1300	2000	1900
Sodium	mg/kg	---	130	---		1400	1100	1200
Thallium	mg/kg	---	0.32	2.6		<0.56	<0.55	<0.54
Vanadium	mg/kg	---	25.2	550		21	21	26
Zinc	mg/kg	---	95	5100		49	47	52
pH			6.25	9		8.4	8.8	7.8

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B14 (0-5)	2490V2-3-B15 (0-5)	2490V2-3-B16 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.77	1	1.5
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.27	0.23	0.35
Cadmium,TCLP	mg/L	---	---	---		0.0021	0.002	0.002
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		410	510	310
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	0.019
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.32	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		110	69	110
Manganese,TCLP	mg/L	---	---	---		0.21	0.54	4.4
Nickel,TCLP	mg/L	---	---	---		0.01	0.011	0.013
Potassium,TCLP	mg/L	---	---	---		1.3	1.5	1.3
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B16 (5-8)	2490V2-3-B17 (0-5)	2490V2-3-B17 (DUP) (0-5)
				CCDD	Sample Depth (feet)	5-8	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0015	<0.0017	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0015	<0.0017	<0.0016
Acetone	mg/kg	---	---	25		<0.015	0.02	0.023
Bromodichloromethane	mg/kg	---	---	0.6		<0.0015	<0.0017	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0015	<0.0017	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0039	<0.0044	<0.0041
2-Butanone	mg/kg	---	---	17		<0.0039	0.0022	0.0045
Carbon Tetrachloride	mg/kg	---	---	0.07		0.00095	<0.0017	0.0015
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.036	<0.037	<0.040
Acenaphthylene	mg/kg	0.03	0.07	85		<0.036	<0.037	<0.040
Anthracene	mg/kg	0.25	0.4	12000		<0.036	<0.037	<0.040
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.036	0.0051	<0.040
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.036	0.024	<0.040
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.036	0.0099	<0.040
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.036	0.017	0.017
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.036	<0.037	<0.040
Chrysene	mg/kg	1.2	2.7	88		<0.036	<0.037	<0.040
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.036	<0.037	<0.040
Fluoranthene	mg/kg	2.7	4.1	3100		<0.036	0.0075	<0.040
Fluorene	mg/kg	0.1	0.18	560		<0.036	<0.037	<0.040
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.036	<0.037	<0.040
Naphthalene	mg/kg	0.04	0.2	1.8		<0.036	<0.037	<0.040
Phenanthrene	mg/kg	1.3	2.5	210		<0.036	<0.037	<0.040
Pyrene	mg/kg	1.9	3.0	2300		<0.036	0.0074	<0.040
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.18	<0.19	<0.20
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.074	<0.075	<0.081
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.3	7.2	6.5
Barium	mg/kg	---	110	1500		39	42	42
Cadmium	mg/kg	---	0.6	5.2		0.12	0.032	0.044
Chromium, total	mg/kg	---	16.2	21		16	20	19
Lead	mg/kg	---	36	107		9.9	14	12
Mercury	mg/kg	---	0.06	0.1		0.018	0.024	0.025
Selenium	mg/kg	---	0.48	1.3		<0.54	0.5	0.83
Silver	mg/kg	---	0.55	4.4		<0.27	<0.27	<0.30
Antimony	mg/kg	---	4.0	5		<1.1	<1.1	<1.2
Beryllium	mg/kg	---	0.59	22		0.68	0.77	0.68
Calcium	mg/kg	---	9,300	---		85000	19000	18000
Cobalt	mg/kg	---	8.9	20		14	12	9.4
Copper	mg/kg	---	19.6	2900		18	21	18
Cyanide	mg/kg	---	0.51	---		<0.57	<0.48	<0.60
Iron	mg/kg	---	15,900	15000		17000	22000	21000
Magnesium	mg/kg	---	4,820	325000		28000	13000	12000
Manganese	mg/kg	---	636	630		390	380	250
Nickel	mg/kg	---	18	100		31	29	23
Potassium	mg/kg	---	1,268	---		2000	1800	1600
Sodium	mg/kg	---	130	---		430	2100	2300
Thallium	mg/kg	---	0.32	2.6		<0.54	<0.55	<0.59
Vanadium	mg/kg	---	25.2	550		19	30	34
Zinc	mg/kg	---	95	5100		45	55	48
pH			6.25	9		7.7	7.9	8.1

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B16 (5-8)	2490V2-3-B17 (0-5)	2490V2-3-B17 (DUP) (0-5)
				CCDD	Sample Depth (feet)	5-8	0-5	0-5
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.16	3.3	2.2
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.28	0.29	0.32
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	0.0022
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		790	320	380
Cobalt,TCLP	mg/L	---	---	---		<0.025	0.025	0.022
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		37	130	120
Manganese,TCLP	mg/L	---	---	---		0.87	4.9	4.4
Nickel,TCLP	mg/L	---	---	---		0.012	0.02	0.02
Potassium,TCLP	mg/L	---	---	---		0.75	1	1.1
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B17 (5-8)	2490V2-3-B18 (0-5)	2490V2-3-B18 (5-8)
				CCDD	Sample Depth (feet)	5-8	0-5	5-8
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0018	<0.0018	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0018	<0.0018	<0.0016
Acetone	mg/kg	---	---	25		<0.018	0.032	0.0084
Bromodichloromethane	mg/kg	---	---	0.6		<0.0018	<0.0018	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0018	<0.0018	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0045	<0.0045	<0.0040
2-Butanone	mg/kg	---	---	17		<0.0045	0.0068	<0.0040
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0018	<0.0018	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.038	<0.038
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.038	<0.038
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.038	<0.038
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.037	<0.038	<0.038
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.037	<0.038	<0.038
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.037	<0.038	<0.038
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.015	<0.038	<0.038
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	<0.038	<0.038
Chrysene	mg/kg	1.2	2.7	88		<0.037	<0.038	<0.038
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.038	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		<0.037	<0.038	<0.038
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.038	<0.038
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	<0.038	<0.038
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.038	<0.038
Phenanthrene	mg/kg	1.3	2.5	210		<0.037	<0.038	<0.038
Pyrene	mg/kg	1.9	3.0	2300		<0.037	<0.038	<0.038
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.078	0.0071
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.8	2.9	1.9
Barium	mg/kg	---	110	1500		35	35	27
Cadmium	mg/kg	---	0.6	5.2		0.064	0.15	0.095
Chromium, total	mg/kg	---	16.2	21		15	9.5	12
Lead	mg/kg	---	36	107		11	7.6	6.9
Mercury	mg/kg	---	0.06	0.1		0.016	0.018	0.015
Selenium	mg/kg	---	0.48	1.3		0.37	0.58	<0.59
Silver	mg/kg	---	0.55	4.4		<0.27	<0.29	<0.29
Antimony	mg/kg	---	4.0	5		<1.1	<1.2	<1.2
Beryllium	mg/kg	---	0.59	22		0.65	0.4	0.46
Calcium	mg/kg	---	9,300	---		92000	24000	81000
Cobalt	mg/kg	---	8.9	20		15	5.4	5.1
Copper	mg/kg	---	19.6	2900		20	9.9	12
Cyanide	mg/kg	---	0.51	---		<0.56	<0.58	<0.57
Iron	mg/kg	---	15,900	15000		17000	10000	12000
Magnesium	mg/kg	---	4,820	325000		31000	14000	34000
Manganese	mg/kg	---	636	630		480	310	200
Nickel	mg/kg	---	18	100		33	12	16
Potassium	mg/kg	---	1,268	---		2200	660	1500
Sodium	mg/kg	---	130	---		1200	1400	410
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.58	<0.59
Vanadium	mg/kg	---	25.2	550		19	17	16
Zinc	mg/kg	---	95	5100		48	24	31
pH			6.25	9		7.7	8.4	8

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B17 (5-8)	2490V2-3-B18 (0-5)	2490V2-3-B18 (5-8)
				CCDD	Sample Depth (feet)	5-8	0-5	5-8
				mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.24	1.7	0.64
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.27	0.36	0.28
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	0.002
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		740	280	360
Cobalt,TCLP	mg/L	---	---	---		<0.025	0.016	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		31	90	160
Manganese,TCLP	mg/L	---	---	---		0.63	9.4	2.7
Nickel,TCLP	mg/L	---	---	---		<0.025	0.013	0.01
Potassium,TCLP	mg/L	---	---	---		1.1	0.99	0.88
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B19 (0-5)	2490V2-3-B20 (0-5)	2490V2-3-B21 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0018	<0.0017	<0.0017
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0018	<0.0017	<0.0017
Acetone	mg/kg	---	---	25		<0.018	<0.017	<0.017
Bromodichloromethane	mg/kg	---	---	0.6		<0.0018	<0.0017	<0.0017
Bromoform	mg/kg	---	---	0.8		<0.0018	<0.0017	<0.0017
Bromomethane	mg/kg	---	---	0.2		<0.0044	<0.0043	<0.0043
2-Butanone	mg/kg	---	---	17		<0.0044	<0.0043	<0.0043
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0018	<0.0017	<0.0017
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.039	<0.037	<0.041
Acenaphthylene	mg/kg	0.03	0.07	85		<0.039	<0.037	<0.041
Anthracene	mg/kg	0.25	0.4	12000		<0.039	<0.037	<0.041
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.039	<0.037	<0.041
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.039	<0.037	<0.041
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.039	<0.037	<0.041
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.039	<0.037	<0.041
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.039	<0.037	<0.041
Chrysene	mg/kg	1.2	2.7	88		<0.039	<0.037	<0.041
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.039	<0.037	<0.041
Fluoranthene	mg/kg	2.7	4.1	3100		<0.039	<0.037	<0.041
Fluorene	mg/kg	0.1	0.18	560		<0.039	<0.037	<0.041
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.039	<0.037	<0.041
Naphthalene	mg/kg	0.04	0.2	1.8		<0.039	<0.037	<0.041
Phenanthrene	mg/kg	1.3	2.5	210		<0.039	<0.037	<0.041
Pyrene	mg/kg	1.9	3.0	2300		<0.039	<0.037	<0.041
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.20	<0.19	0.43
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.080	<0.076	<0.082
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		6	5.9	2.7
Barium	mg/kg	---	110	1500		68	45	89
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.12	<0.11
Chromium, total	mg/kg	---	16.2	21		18	14	14
Lead	mg/kg	---	36	107		14	11	9.7
Mercury	mg/kg	---	0.06	0.1		0.034	0.026	0.024
Selenium	mg/kg	---	0.48	1.3		0.66	0.45	<0.56
Silver	mg/kg	---	0.55	4.4		<0.28	<0.29	<0.28
Antimony	mg/kg	---	4.0	5		<1.1	<1.2	<1.1
Beryllium	mg/kg	---	0.59	22		0.64	0.46	0.59
Calcium	mg/kg	---	9,300	---		2600	14000	2700
Cobalt	mg/kg	---	8.9	20		9.9	8.6	4.1
Copper	mg/kg	---	19.6	2900		16	17	15
Cyanide	mg/kg	---	0.51	---		<0.56	<0.50	<0.50
Iron	mg/kg	---	15,900	15000		21000	16000	13000
Magnesium	mg/kg	---	4,820	325000		3200	9700	2500
Manganese	mg/kg	---	636	630		290	380	78
Nickel	mg/kg	---	18	100		23	20	14
Potassium	mg/kg	---	1,268	---		1000	860	710
Sodium	mg/kg	---	130	---		48	57	45
Thallium	mg/kg	---	0.32	2.6		<0.56	<0.58	<0.56
Vanadium	mg/kg	---	25.2	550		29	24	21
Zinc	mg/kg	---	95	5100		52	56	46
pH			6.25	9		7.5	7.2	7.1



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B19 (0-5)	2490V2-3-B20 (0-5)	2490V2-3-B21 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		--	--	--
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.18	0.39	0.25
Cadmium,TCLP	mg/L	---	---	---		<0.0050	0.0021	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		57	220	54
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.66	<0.40	0.54
Magnesium,TCLP	mg/L	---	---	---		23	120	21
Manganese,TCLP	mg/L	---	---	---		0.012	0.088	0.018
Nickel,TCLP	mg/L	---	---	---		<0.025	0.014	<0.025
Potassium,TCLP	mg/L	---	---	---		0.95	1.3	0.76
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.035	<0.50	0.072

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B22 (0-5)	2490V2-3-B23 (0-5)	2490V2-3-B24 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0018	<0.0019	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0018	<0.0019	<0.0016
Acetone	mg/kg	---	---	25		<0.018	<0.019	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0018	<0.0019	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0018	<0.0019	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0046	<0.0047	<0.0041
2-Butanone	mg/kg	---	---	17		<0.0046	<0.0047	<0.0041
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0018	<0.0019	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.040	<0.041	<0.037
Acenaphthylene	mg/kg	0.03	0.07	85		<0.040	<0.041	<0.037
Anthracene	mg/kg	0.25	0.4	12000		<0.040	<0.041	<0.037
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.040	0.035	<0.037
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.040	0.046	<0.037
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.040	0.06	<0.037
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.040	0.034	<0.037
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.040	0.029	<0.037
Chrysene	mg/kg	1.2	2.7	88		<0.040	0.046	<0.037
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.040	0.01	<0.037
Fluoranthene	mg/kg	2.7	4.1	3100		<0.040	0.085	<0.037
Fluorene	mg/kg	0.1	0.18	560		<0.040	<0.041	<0.037
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.040	0.031	<0.037
Naphthalene	mg/kg	0.04	0.2	1.8		<0.040	<0.041	<0.037
Phenanthrene	mg/kg	1.3	2.5	210		<0.040	0.023	<0.037
Pyrene	mg/kg	1.9	3.0	2300		<0.040	0.05	<0.037
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.20	<0.21	<0.18
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.082	<0.083	<0.074
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		7.4	5.3	5.1
Barium	mg/kg	---	110	1500		68	47	40
Cadmium	mg/kg	---	0.6	5.2		<0.12	<0.12	<0.11
Chromium, total	mg/kg	---	16.2	21		23	15	14
Lead	mg/kg	---	36	107		16	18	11
Mercury	mg/kg	---	0.06	0.1		0.038	0.029	0.014
Selenium	mg/kg	---	0.48	1.3		0.57	0.56	0.34
Silver	mg/kg	---	0.55	4.4		<0.29	<0.29	<0.27
Antimony	mg/kg	---	4.0	5		<1.2	<1.2	<1.1
Beryllium	mg/kg	---	0.59	22		0.88	0.57	0.57
Calcium	mg/kg	---	9,300	---		9500	13000	91000
Cobalt	mg/kg	---	8.9	20		15	11	10
Copper	mg/kg	---	19.6	2900		25	16	17
Cyanide	mg/kg	---	0.51	---		<0.55	<0.61	<0.52
Iron	mg/kg	---	15,900	15000		25000	16000	16000
Magnesium	mg/kg	---	4,820	325000		9900	9000	31000
Manganese	mg/kg	---	636	630		400	410	400
Nickel	mg/kg	---	18	100		41	21	26
Potassium	mg/kg	---	1,268	---		2500	1700	2000
Sodium	mg/kg	---	130	---		340	670	110
Thallium	mg/kg	---	0.32	2.6		<0.58	<0.59	<0.54
Vanadium	mg/kg	---	25.2	550		28	22	19
Zinc	mg/kg	---	95	5100		67	51	43
pH			6.25	9		7.9	7.1	7.7

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B22 (0-5)	2490V2-3-B23 (0-5)	2490V2-3-B24 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		1.2	0.72	--
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.33	0.3	0.34
Cadmium,TCLP	mg/L	---	---	---		0.0024	0.0025	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		230	250	850
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.27	0.31	<0.40
Magnesium,TCLP	mg/L	---	---	---		130	120	30
Manganese,TCLP	mg/L	---	---	---		0.26	0.74	0.086
Nickel,TCLP	mg/L	---	---	---		0.013	0.011	<0.025
Potassium,TCLP	mg/L	---	---	---		1.1	6.2	1.1
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.036	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B24 DUP (0-5)	2490V2-3-B25 (0-5)	2490V2-3-B26 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0016	<0.0017	<0.0016
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0017	<0.0016
Acetone	mg/kg	---	---	25		<0.016	<0.017	<0.016
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0017	<0.0016
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0017	<0.0016
Bromomethane	mg/kg	---	---	0.2		<0.0039	<0.0043	<0.0039
2-Butanone	mg/kg	---	---	17		<0.0039	<0.0043	<0.0039
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	<0.0017	<0.0016
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.041	<0.038
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.041	<0.038
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.041	<0.038
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.013	<0.041	<0.038
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.01	<0.041	<0.038
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.011	<0.041	<0.038
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.037	<0.041	<0.038
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	<0.041	<0.038
Chrysene	mg/kg	1.2	2.7	88		0.011	<0.041	<0.038
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.041	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		0.024	<0.041	<0.038
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.041	<0.038
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	<0.041	<0.038
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.041	<0.038
Phenanthrene	mg/kg	1.3	2.5	210		0.018	<0.041	<0.038
Pyrene	mg/kg	1.9	3.0	2300		0.019	<0.041	<0.038
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.21	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.075	<0.083	<0.077
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		6.2	6.9	5.8
Barium	mg/kg	---	110	1500		37	76	43
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.12	<0.11
Chromium, total	mg/kg	---	16.2	21		15	18	18
Lead	mg/kg	---	36	107		11	14	11
Mercury	mg/kg	---	0.06	0.1		0.016	0.043	0.016
Selenium	mg/kg	---	0.48	1.3		<0.53	0.52	<0.54
Silver	mg/kg	---	0.55	4.4		<0.27	<0.29	<0.27
Antimony	mg/kg	---	4.0	5		<1.1	<1.2	<1.1
Beryllium	mg/kg	---	0.59	22		0.57	0.64	0.66
Calcium	mg/kg	---	9,300	---		130000	2300	74000
Cobalt	mg/kg	---	8.9	20		12	14	11
Copper	mg/kg	---	19.6	2900		19	16	20
Cyanide	mg/kg	---	0.51	---		<0.53	<0.58	<0.54
Iron	mg/kg	---	15,900	15000		16000	21000	18000
Magnesium	mg/kg	---	4,820	325000		35000	3100	33000
Manganese	mg/kg	---	636	630		400	470	320
Nickel	mg/kg	---	18	100		28	20	26
Potassium	mg/kg	---	1,268	---		2200	860	2400
Sodium	mg/kg	---	130	---		130	36	130
Thallium	mg/kg	---	0.32	2.6		<0.53	<0.58	<0.54
Vanadium	mg/kg	---	25.2	550		19	34	22
Zinc	mg/kg	---	95	5100		45	55	48
pH			6.25	9		7.6	6.9	7.7

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B24 DUP (0-5)	2490V2-3-B25 (0-5)	2490V2-3-B26 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.25	--	--
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.33	0.35	0.31
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		840	89	500
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		30	42	120
Manganese,TCLP	mg/L	---	---	---		0.25	0.014	0.068
Nickel,TCLP	mg/L	---	---	---		<0.025	0.018	<0.025
Potassium,TCLP	mg/L	---	---	---		1.1	0.77	0.98
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	0.032

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B27 (0-5)	2490V2-3-B28 (0-5)	2490V2-3-B29 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		pH 6.25-9.0						
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0016	<0.0016	<0.0018
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0016	<0.0018
Acetone	mg/kg	---	---	25		<0.016	<0.016	<0.018
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0016	<0.0018
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0016	<0.0018
Bromomethane	mg/kg	---	---	0.2		<0.0039	<0.0040	<0.0044
2-Butanone	mg/kg	---	---	17		<0.0039	<0.0040	<0.0044
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	<0.0016	<0.0018
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.037	<0.037	<0.039
Acenaphthylene	mg/kg	0.03	0.07	85		<0.037	<0.037	<0.039
Anthracene	mg/kg	0.25	0.4	12000		<0.037	<0.037	<0.039
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.037	<0.037	<0.039
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.037	<0.037	<0.039
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.037	<0.037	<0.039
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.037	<0.037	<0.039
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.037	<0.037	<0.039
Chrysene	mg/kg	1.2	2.7	88		<0.037	<0.037	<0.039
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.037	<0.037	<0.039
Fluoranthene	mg/kg	2.7	4.1	3100		<0.037	<0.037	<0.039
Fluorene	mg/kg	0.1	0.18	560		<0.037	<0.037	<0.039
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.037	<0.037	<0.039
Naphthalene	mg/kg	0.04	0.2	1.8		<0.037	<0.037	<0.039
Phenanthrene	mg/kg	1.3	2.5	210		<0.037	<0.037	<0.039
Pyrene	mg/kg	1.9	3.0	2300		<0.037	<0.037	<0.039
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	<0.20
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.076	<0.075	<0.079
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		3.3	5.9	6.4
Barium	mg/kg	---	110	1500		58	35	56
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.11	<0.12
Chromium, total	mg/kg	---	16.2	21		11	14	16
Lead	mg/kg	---	36	107		8.6	12	12
Mercury	mg/kg	---	0.06	0.1		0.016	0.014	0.043
Selenium	mg/kg	---	0.48	1.3		0.79	0.36	0.83
Silver	mg/kg	---	0.55	4.4		<0.29	<0.27	<0.29
Antimony	mg/kg	---	4.0	5		<1.1	<1.1	<1.2
Beryllium	mg/kg	---	0.59	22		0.43	0.55	0.57
Calcium	mg/kg	---	9,300	---		15000	110000	10000
Cobalt	mg/kg	---	8.9	20		13	11	8.4
Copper	mg/kg	---	19.6	2900		54	20	17
Cyanide	mg/kg	---	0.51	---		<0.43	<0.53	<0.59
Iron	mg/kg	---	15,900	15000		23000	16000	19000
Magnesium	mg/kg	---	4,820	325000		9100	38000	7900
Manganese	mg/kg	---	636	630		490	350	330
Nickel	mg/kg	---	18	100		13	26	19
Potassium	mg/kg	---	1,268	---		1300	2200	840
Sodium	mg/kg	---	130	---		530	480	62
Thallium	mg/kg	---	0.32	2.6		<0.57	<0.54	<0.59
Vanadium	mg/kg	---	25.2	550		25	19	27
Zinc	mg/kg	---	95	5100		40	46	49
pH			6.25	9		8.3	8.5	7.2

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B27 (0-5)	2490V2-3-B28 (0-5)	2490V2-3-B29 (0-5)
				CCDD	Sample Depth (feet)	0-5	0-5	0-5
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		1	--	0.63
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.33	0.31	0.45
Cadmium,TCLP	mg/L	---	---	---		0.0021	<0.0050	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		380	460	300
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	0.33	<0.40
Magnesium,TCLP	mg/L	---	---	---		130	130	170
Manganese,TCLP	mg/L	---	---	---		0.67	0.14	0.35
Nickel,TCLP	mg/L	---	---	---		0.01	0.012	0.017
Potassium,TCLP	mg/L	---	---	---		2.6	1.2	0.78
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.063	<0.50

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B29 (5-10)	2490V2-3-B30 (0-5)	2490V2-3-B30 (5-10)
				CCDD	Sample Depth (feet)	5-10	0-5	5-10
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0016	<0.0018	<0.0015
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0016	<0.0018	<0.0015
Acetone	mg/kg	---	---	25		<0.016	<0.018	<0.015
Bromodichloromethane	mg/kg	---	---	0.6		<0.0016	<0.0018	<0.0015
Bromoform	mg/kg	---	---	0.8		<0.0016	<0.0018	<0.0015
Bromomethane	mg/kg	---	---	0.2		<0.0039	<0.0046	<0.0038
2-Butanone	mg/kg	---	---	17		<0.0039	<0.0046	<0.0038
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0016	<0.0018	0.0011
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.038	<0.041	<0.038
Acenaphthylene	mg/kg	0.03	0.07	85		<0.038	<0.041	<0.038
Anthracene	mg/kg	0.25	0.4	12000		<0.038	<0.041	<0.038
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.038	<0.041	<0.038
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.038	<0.041	<0.038
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.038	<0.041	<0.038
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.038	<0.041	<0.038
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.038	<0.041	<0.038
Chrysene	mg/kg	1.2	2.7	88		<0.038	<0.041	<0.038
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.038	<0.041	<0.038
Fluoranthene	mg/kg	2.7	4.1	3100		<0.038	<0.041	<0.038
Fluorene	mg/kg	0.1	0.18	560		<0.038	<0.041	<0.038
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.038	<0.041	<0.038
Naphthalene	mg/kg	0.04	0.2	1.8		<0.038	<0.041	<0.038
Phenanthrene	mg/kg	1.3	2.5	210		<0.038	<0.041	<0.038
Pyrene	mg/kg	1.9	3.0	2300		<0.038	<0.041	<0.038
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.21	<0.19
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.077	<0.084	<0.076
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.8	6.6	5.2
Barium	mg/kg	---	110	1500		28	71	31
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.12	<0.10
Chromium, total	mg/kg	---	16.2	21		15	21	16
Lead	mg/kg	---	36	107		11	16	11
Mercury	mg/kg	---	0.06	0.1		0.011	0.037	0.013
Selenium	mg/kg	---	0.48	1.3		0.56	0.62	<0.52
Silver	mg/kg	---	0.55	4.4		<0.27	<0.31	<0.26
Antimony	mg/kg	---	4.0	5		0.21	<1.2	0.2
Beryllium	mg/kg	---	0.59	22		0.53	0.93	0.59
Calcium	mg/kg	---	9,300	---		100000	2100	100000
Cobalt	mg/kg	---	8.9	20		10	15	12
Copper	mg/kg	---	19.6	2900		20	21	19
Cyanide	mg/kg	---	0.51	---		<0.57	<0.62	0.26
Iron	mg/kg	---	15,900	15000		16000	22000	16000
Magnesium	mg/kg	---	4,820	325000		33000	4100	34000
Manganese	mg/kg	---	636	630		320	600	350
Nickel	mg/kg	---	18	100		26	35	29
Potassium	mg/kg	---	1,268	---		2300	2000	2700
Sodium	mg/kg	---	130	---		130	800	470
Thallium	mg/kg	---	0.32	2.6		<0.55	<0.61	<0.52
Vanadium	mg/kg	---	25.2	550		20	26	19
Zinc	mg/kg	---	95	5100		52	70	47
pH			6.25	9		8	7.6	8.6



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B29 (5-10)	2490V2-3-B30 (0-5)	2490V2-3-B30 (5-10)
				CCDD	Sample Depth (feet)	5-10	0-5	5-10
				mg/kg	Date Collected	3/5/2018	3/5/2018	3/5/2018
		Chicago	MSAs	pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.59	1.5	0.62
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.26	0.21	0.28
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		830	58	1000
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	0.012
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	0.36	<0.40
Magnesium,TCLP	mg/L	---	---	---		46	19	43
Manganese,TCLP	mg/L	---	---	---		1	0.22	0.99
Nickel,TCLP	mg/L	---	---	---		0.011	0.01	<0.025
Potassium,TCLP	mg/L	---	---	---		1.9	1.1	1.4
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.024	0.034

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B31 (0-5)	2490V2-3-B31 (5-10)	
				CCDD	Sample Depth (feet)	0-5	5-10	
		mg/kg	Chicago	MSAs	pH 6.25-9.0	Date Collected	3/5/2018	3/5/2018
<b>Volatile Organic Analytical Parameters</b>								
Toluene	mg/kg	---	---	12		<0.0017	<0.0015	
Methyl Tertiary-Butyl Ether	mg/kg	---	---	0.32		<0.0017	<0.0015	
Acetone	mg/kg	---	---	25		<0.017	<0.015	
Bromodichloromethane	mg/kg	---	---	0.6		<0.0017	<0.0015	
Bromoform	mg/kg	---	---	0.8		<0.0017	<0.0015	
Bromomethane	mg/kg	---	---	0.2		<0.0042	<0.0038	
2-Butanone	mg/kg	---	---	17		<0.0042	<0.0038	
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0017	<0.0015	
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.038	<0.038	
Acenaphthylene	mg/kg	0.03	0.07	85		<0.038	<0.038	
Anthracene	mg/kg	0.25	0.4	12000		<0.038	<0.038	
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.038	<0.038	
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.038	0.023	
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.038	<0.038	
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.038	0.016	
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.038	<0.038	
Chrysene	mg/kg	1.2	2.7	88		<0.038	<0.038	
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.038	<0.038	
Fluoranthene	mg/kg	2.7	4.1	3100		<0.038	<0.038	
Fluorene	mg/kg	0.1	0.18	560		<0.038	<0.038	
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.038	<0.038	
Naphthalene	mg/kg	0.04	0.2	1.8		<0.038	<0.038	
Phenanthrene	mg/kg	1.3	2.5	210		<0.038	<0.038	
Pyrene	mg/kg	1.9	3.0	2300		<0.038	<0.038	
bis(2-Ethylhexyl)phthalate	mg/kg	---	---	46		<0.19	<0.19	
2-Methylnaphthalene	mg/kg	---	0.14	---		<0.076	<0.077	
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		11	5.5	
Barium	mg/kg	---	110	1500		36	32	
Cadmium	mg/kg	---	0.6	5.2		<0.11	<0.11	
Chromium, total	mg/kg	---	16.2	21		14	16	
Lead	mg/kg	---	36	107		15	11	
Mercury	mg/kg	---	0.06	0.1		0.028	0.015	
Selenium	mg/kg	---	0.48	1.3		0.64	0.42	
Silver	mg/kg	---	0.55	4.4		<0.29	<0.27	
Antimony	mg/kg	---	4.0	5		<1.1	<1.1	
Beryllium	mg/kg	---	0.59	22		0.46	0.61	
Calcium	mg/kg	---	9,300	---		53000	130000	
Cobalt	mg/kg	---	8.9	20		11	9.6	
Copper	mg/kg	---	19.6	2900		23	20	
Cyanide	mg/kg	---	0.51	---		<0.51	<0.55	
Iron	mg/kg	---	15,900	15000		25000	17000	
Magnesium	mg/kg	---	4,820	325000		26000	35000	
Manganese	mg/kg	---	636	630		500	300	
Nickel	mg/kg	---	18	100		29	26	
Potassium	mg/kg	---	1,268	---		1300	2900	
Sodium	mg/kg	---	130	---		92	140	
Thallium	mg/kg	---	0.32	2.6		<0.57	<0.54	
Vanadium	mg/kg	---	25.2	550		22	19	
Zinc	mg/kg	---	95	5100		81	48	
pH			6.25	9		7	7.9	

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-3)

Crystal Lake, IL

Terracon Project No. 11187007B

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Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-3-B31 (0-5)	2490V2-3-B31 (5-10)
				CCDD	Sample Depth (feet)	0-5	5-10
				mg/kg	Date Collected	3/5/2018	3/5/2018
				pH 6.25-9.0			
<b>Inorganic Analytical Parameters (SPLP)</b>							
Antimony,SPLP	mg/L	---	---	---		-	-
Arsenic,SPLP	mg/L	---	---	---		--	--
Barium,SPLP	mg/L	---	---	---		--	--
Beryllium,SPLP	mg/L	---	---	---		--	--
Cadmium,SPLP	mg/L	---	---	---		--	--
Calcium,SPLP	mg/L	---	---	---		--	--
Chromium,SPLP	mg/L	---	---	---		--	--
Cobalt,SPLP	mg/L	---	---	---		--	--
Copper,SPLP	mg/L	---	---	---		--	--
Iron,SPLP	mg/L	---	---	---		--	--
Lead,SPLP	mg/L	---	---	---		--	--
Magnesium,SPLP	mg/L	---	---	---		--	--
Manganese,SPLP	mg/L	---	---	---		0.63	0.47
Mercury,SPLP	mg/L	---	---	---		--	--
Nickel,SPLP	mg/L	---	---	---		--	--
Potassium,SPLP	mg/L	---	---	---		--	--
Selenium,SPLP	mg/L	---	---	---		--	--
Silver,SPLP	mg/L	---	---	---		--	--
Sodium,SPLP	mg/L	---	---	---		--	--
Thallium,SPLP	mg/L	---	---	---		--	--
Vanadium,SPLP	mg/L	---	---	---		--	--
Zinc,SPLP	mg/L	---	---	---		--	--
Cyanide,SPLP	mg/L	---	---	---		--	--
<b>Inorganic Analytical Parameters (TCLP)</b>							
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.3	0.28
Cadmium,TCLP	mg/L	---	---	---		<0.0050	0.0021
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		390	990
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		220	50
Manganese,TCLP	mg/L	---	---	---		0.19	0.67
Nickel,TCLP	mg/L	---	---	---		<0.025	<0.025
Potassium,TCLP	mg/L	---	---	---		1.8	1.6
Sodium,TCLP	mg/L	---	---	---		--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	0.076

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141817-1

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/16/2018 3:03:46 PM

Richard Wright, Senior Project Manager

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### LINKS

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*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Job ID: 500-141817-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141817-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 9:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.6° C, 2.9° C and 3.1° C. Sample 2490V2-3-B11 (10-15) was received but not listed on the chain of custody. Sample was added to the COC by TestAmerica personnel and logged in for analysis.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS samples associated with batches 422818 and 422971: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for three analytes: 4,6-Dinitro-2-methylphenol; 2,4-Dinitrophenol; and Hexachlorocyclopentadiene. The associated LCS was in control. Data has been qualified and reported.(500-141817-E-1-B MS) and (500-141817-E-1-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.024	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.055		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.057	F1	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.033	J F1	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.034	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.028	J F1	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.050		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.033	J F1	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.025	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.049		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.1	F1	0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.56	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	F1 F2	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.3		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	F2	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	40	F2	0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000	F2	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000	B F2	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	620		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63	F1	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20	F1	0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B F1 F2	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	800	F1	28	9.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100	F1	56	8.2	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0043	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	220		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.086		0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	3.8		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.060		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	87		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	17		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.84	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.22	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.18		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.63		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.0077	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5) (Continued)**

**Lab Sample ID: 500-141817-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.063		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.072		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.035	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.029	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.041		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.028	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.10		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.039		0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.064		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.077		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.3		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	38000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Calcium	95000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	340		0.52	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	42	B	1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	570		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.70		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.68	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.035		0.016	0.0069	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0078		0.0040	0.0018	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.0011	J	0.0016	0.00040	mg/Kg	1	☼	8260B	Total/NA
Anthracene	0.014	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.096		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.15		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.28		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.081		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) (Continued)**

**Lab Sample ID: 500-141817-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.10		0.037	0.011	mg/Kg	1		☼	8270D	Total/NA
Chrysene	0.13		0.037	0.010	mg/Kg	1		☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.036	J	0.037	0.0072	mg/Kg	1		☼	8270D	Total/NA
Fluoranthene	0.24		0.037	0.0069	mg/Kg	1		☼	8270D	Total/NA
Fluorene	0.0053	J	0.037	0.0052	mg/Kg	1		☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.071		0.037	0.0097	mg/Kg	1		☼	8270D	Total/NA
Phenanthrene	0.10		0.037	0.0052	mg/Kg	1		☼	8270D	Total/NA
Pyrene	0.25		0.037	0.0074	mg/Kg	1		☼	8270D	Total/NA
Antimony	0.30	J	1.1	0.21	mg/Kg	1		☼	6010B	Total/NA
Arsenic	5.1		0.55	0.19	mg/Kg	1		☼	6010B	Total/NA
Barium	39		0.55	0.063	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.50		0.22	0.052	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.020	mg/Kg	1		☼	6010B	Total/NA
Chromium	13		0.55	0.27	mg/Kg	1		☼	6010B	Total/NA
Cobalt	8.4		0.28	0.072	mg/Kg	1		☼	6010B	Total/NA
Copper	16		0.55	0.15	mg/Kg	1		☼	6010B	Total/NA
Iron	14000		11	5.7	mg/Kg	1		☼	6010B	Total/NA
Lead	22		0.28	0.13	mg/Kg	1		☼	6010B	Total/NA
Magnesium	21000		5.5	2.7	mg/Kg	1		☼	6010B	Total/NA
Calcium	56000	B	110	19	mg/Kg	10		☼	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1		☼	6010B	Total/NA
Nickel	18		0.55	0.16	mg/Kg	1		☼	6010B	Total/NA
Selenium	0.38	J	0.55	0.32	mg/Kg	1		☼	6010B	Total/NA
Vanadium	20		0.28	0.065	mg/Kg	1		☼	6010B	Total/NA
Zinc	46	B	1.1	0.48	mg/Kg	1		☼	6010B	Total/NA
Potassium	1200		28	9.8	mg/Kg	1		☼	6010B	Total/NA
Sodium	1400		55	8.2	mg/Kg	1		☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Calcium	440		5.0	0.50	mg/L	1			6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.0091		0.0075	0.0075	mg/L	1			6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1			6010B	TCLP
Manganese	4.7		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1			6010B	TCLP
Potassium	0.82	J	2.5	0.50	mg/L	1			6010B	TCLP
Zinc	0.036	J	0.50	0.020	mg/L	1			6010B	TCLP
Lead	0.18		0.0075	0.0075	mg/L	1			6010B	SPLP East
Manganese	1.3		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.020		0.018	0.0059	mg/Kg	1		☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1			9045D	Total/NA

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.025		0.016	0.0071	mg/Kg	1		☼	8260B	Total/NA
2-Butanone (MEK)	0.0056		0.0041	0.0018	mg/Kg	1		☼	8260B	Total/NA
Toluene	0.0012	J	0.0016	0.00041	mg/Kg	1		☼	8260B	Total/NA
Benzo[a]anthracene	0.024	J	0.037	0.0050	mg/Kg	1		☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.037	0.0072	mg/Kg	1		☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup (Continued)**

**Lab Sample ID: 500-141817-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.061		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.034	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.020	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.048		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.037		0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.013	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.040		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.5		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.084	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.6		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	190		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	43	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	370		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	160		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	4.5		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.69	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.022	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.026	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.013	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0096	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.061	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10) (Continued)**

**Lab Sample ID: 500-141817-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	10		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	9.5		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	340		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	580		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	960		50	5.0	mg/L	10		6010B	TCLP
Magnesium	48		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	2.8		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.29		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.012	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.026	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.016	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0085	J	0.076	0.0070	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.027	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.9		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.096	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	36		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	9.7		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	360		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	42	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Calcium	840		50	5.0	mg/L	10		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B06 (10-15) (Continued)

## Lab Sample ID: 500-141817-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Copper	0.010	J	0.025	0.010	mg/L	1			6010B	TCLP
Magnesium	36		2.5	0.50	mg/L	1			6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.052		0.025	0.010	mg/L	1			6010B	TCLP
Potassium	4.5		2.5	0.50	mg/L	1			6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.013	J	0.017	0.0058	mg/Kg	1		☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1			9045D	Total/NA

## Client Sample ID: 2490V2-3-B07 (0-5)

## Lab Sample ID: 500-141817-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.011	J	0.016	0.0071	mg/Kg	1		☼	8260B	Total/NA
Anthracene	0.010	J	0.035	0.0060	mg/Kg	1		☼	8270D	Total/NA
Benzo[a]anthracene	0.081		0.035	0.0048	mg/Kg	1		☼	8270D	Total/NA
Benzo[a]pyrene	0.12		0.035	0.0069	mg/Kg	1		☼	8270D	Total/NA
Benzo[b]fluoranthene	0.22		0.035	0.0077	mg/Kg	1		☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.069		0.035	0.011	mg/Kg	1		☼	8270D	Total/NA
Benzo[k]fluoranthene	0.083		0.035	0.010	mg/Kg	1		☼	8270D	Total/NA
Chrysene	0.10		0.035	0.0097	mg/Kg	1		☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.034	J	0.035	0.0069	mg/Kg	1		☼	8270D	Total/NA
Fluoranthene	0.17		0.035	0.0066	mg/Kg	1		☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.067		0.035	0.0092	mg/Kg	1		☼	8270D	Total/NA
Phenanthrene	0.059		0.035	0.0050	mg/Kg	1		☼	8270D	Total/NA
Pyrene	0.20		0.035	0.0071	mg/Kg	1		☼	8270D	Total/NA
Arsenic	4.6		0.56	0.19	mg/Kg	1		☼	6010B	Total/NA
Barium	51		0.56	0.064	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.53		0.22	0.052	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1		☼	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1		☼	6010B	Total/NA
Cobalt	8.2		0.28	0.073	mg/Kg	1		☼	6010B	Total/NA
Copper	15		0.56	0.16	mg/Kg	1		☼	6010B	Total/NA
Iron	14000		11	5.8	mg/Kg	1		☼	6010B	Total/NA
Lead	30		0.28	0.13	mg/Kg	1		☼	6010B	Total/NA
Magnesium	21000		5.6	2.8	mg/Kg	1		☼	6010B	Total/NA
Calcium	52000	B	110	19	mg/Kg	10		☼	6010B	Total/NA
Manganese	500		0.56	0.081	mg/Kg	1		☼	6010B	Total/NA
Nickel	18		0.56	0.16	mg/Kg	1		☼	6010B	Total/NA
Selenium	0.52	J	0.56	0.33	mg/Kg	1		☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1		☼	6010B	Total/NA
Zinc	47	B	1.1	0.49	mg/Kg	1		☼	6010B	Total/NA
Potassium	1200		28	9.9	mg/Kg	1		☼	6010B	Total/NA
Sodium	1700		56	8.2	mg/Kg	1		☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1			6010B	TCLP
Cadmium	0.0031	J	0.0050	0.0020	mg/L	1			6010B	TCLP
Calcium	350		5.0	0.50	mg/L	1			6010B	TCLP
Cobalt	0.033		0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.010		0.0075	0.0075	mg/L	1			6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1			6010B	TCLP
Manganese	10		0.025	0.010	mg/L	1			6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B07 (0-5) (Continued)

## Lab Sample ID: 500-141817-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.79	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.032	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.24		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.8		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B07 (5-10)

## Lab Sample ID: 500-141817-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.0070	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.044		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.080		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.13		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.036	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.070		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.029	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.12		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.051		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.054		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.11		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.5		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.078	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.3		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	32000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	280		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	47	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2100		28	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.25	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	870		50	5.0	mg/L	10		6010B	TCLP
Magnesium	42		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.9	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.022	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.27	J	0.55	0.19	mg/Kg	1	☼	9014	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B07 (5-10) (Continued)

## Lab Sample ID: 500-141817-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B07 (10-15)

## Lab Sample ID: 500-141817-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0080	J	0.015	0.0065	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]pyrene	0.024	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.027	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.039	J	0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA
Naphthalene	0.0073	J	0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.044		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.6		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	25		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.088	J B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	41000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	350		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	45	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Calcium	730		50	5.0	mg/L	10		6010B	TCLP
Cobalt	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	49		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.084		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.4		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B08 (0-5)

## Lab Sample ID: 500-141817-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.00098	J	0.0016	0.00046	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.011	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.033	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.024	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.011	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.016	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5) (Continued)**

**Lab Sample ID: 500-141817-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.029	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.029	J	0.037	0.0098	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.017	J	0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.22	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.5		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	54		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.048	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.0		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8300		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	450		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	39	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1600		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	360		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.51	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.028		0.015	0.0066	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0049		0.0038	0.0017	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.047		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.078		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.11		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.044		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.046		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.061		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.046		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.043		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.097		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B09 (0-5) (Continued)

## Lab Sample ID: 500-141817-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.5		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	65000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	50	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1600		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	390		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	83		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	6.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.80	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B10 (0-5)

## Lab Sample ID: 500-141817-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.017		0.015	0.0066	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0031	J	0.0038	0.0017	mg/Kg	1	☼	8260B	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.9		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.77	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.2		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	36000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	330		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	22		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	54	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Barium	0.31	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B10 (0-5) (Continued)

## Lab Sample ID: 500-141817-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	450		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	86		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	4.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.34	J	0.57	0.20	mg/Kg	1	☼	9014	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B11 (0-5)

## Lab Sample ID: 500-141817-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.024	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	54		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.83		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.047	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	19		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53	B	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	3000		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	420		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.57		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.93	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B11 (5-10)

## Lab Sample ID: 500-141817-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.024	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0075	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B11 (5-10) (Continued)

## Lab Sample ID: 500-141817-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.6		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.57	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.085	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	9.2		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.7	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	95000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	25		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	560		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.25	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	740		50	5.0	mg/L	10		6010B	TCLP
Magnesium	43		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.7	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B11 (5-10) Dup

## Lab Sample ID: 500-141817-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzof[g,h,i]perylene	0.025	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.0059	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.010	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.3		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	23		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.078	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.7		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	6.2		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	180000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	270		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	40	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2100		27	9.7	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B11 (5-10) Dup (Continued)

## Lab Sample ID: 500-141817-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	560		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	820		50	5.0	mg/L	10		6010B	TCLP
Magnesium	45		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	2.1	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.33		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B16 (0-5)

## Lab Sample ID: 500-141817-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.015	0.0066	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]pyrene	0.025	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.7		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.82		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	21		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	23000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8500		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	11000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.87		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	52	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	310		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	4.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B16 (5-8)

## Lab Sample ID: 500-141817-17

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B16 (5-8) (Continued)

## Lab Sample ID: 500-141817-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.00095	J	0.0015	0.00045	mg/Kg	1	☼	8260B	Total/NA
Arsenic	5.3		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	9.9		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	85000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	390		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	45	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	790		50	5.0	mg/L	10		6010B	TCLP
Magnesium	37		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.87		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.75	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.16		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B17 (0-5)

## Lab Sample ID: 500-141817-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.020		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0022	J	0.0044	0.0019	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.0051	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0099	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0075	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0074	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.2		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.032	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	20		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	21		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	22000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	13000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	19000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B17 (0-5) (Continued)

## Lab Sample ID: 500-141817-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	380		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.50	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	30		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	55	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	1800		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	2100		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.29	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	320		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	4.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	3.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B17 (0-5) Dup

## Lab Sample ID: 500-141817-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.023		0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0045		0.0041	0.0018	mg/Kg	1	☼	8260B	Total/NA
Carbon tetrachloride	0.0015	J	0.0016	0.00048	mg/Kg	1	☼	8260B	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.5		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.044	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	19		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.4		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	34		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		30	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	2300		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	380		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	4.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B17 (0-5) Dup (Continued)

## Lab Sample ID: 500-141817-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.1	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B17 (5-8)

## Lab Sample ID: 500-141817-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.015	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.064	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	92000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	480		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	740		50	5.0	mg/L	10		6010B	TCLP
Magnesium	31		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.63		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B18 (0-5)

## Lab Sample ID: 500-141817-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.032		0.018	0.0078	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0068		0.0045	0.0020	mg/Kg	1	☼	8260B	Total/NA
Arsenic	2.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.5		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.4		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B18 (0-5) (Continued)

## Lab Sample ID: 500-141817-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	14000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	24000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	280		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	90		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	9.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.99	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B18 (5-8)

## Lab Sample ID: 500-141817-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0084	J	0.016	0.0070	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.0071	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Arsenic	1.9		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	27		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.095	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	6.9		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	34000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	81000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Manganese	200		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	360		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	160		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.88	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Client Sample ID: 2490V2-3-B18 (5-8) (Continued)

## Lab Sample ID: 500-141817-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.015	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B11 (10-15)

## Lab Sample ID: 500-141817-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.0011	J	0.0014	0.00042	mg/Kg	1	☼	8260B	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.019	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.038	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Naphthalene	0.0085	J	0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.044		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.7		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	360		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.44	J	0.54	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	42		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		54	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.41	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	680		50	5.0	mg/L	10		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	45		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.5		2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.043	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.049		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141817-1	2490V2-3-B01 (0-5)	Solid	03/06/18 14:10	03/07/18 09:23
500-141817-2	2490V2-3-B02 (0-5)	Solid	03/06/18 13:50	03/07/18 09:23
500-141817-3	2490V2-3-B06 (0-5)	Solid	03/06/18 10:30	03/07/18 09:23
500-141817-4	2490V2-3-B06 (0-5) Dup	Solid	03/06/18 10:30	03/07/18 09:23
500-141817-5	2490V2-3-B06 (5-10)	Solid	03/06/18 10:40	03/07/18 09:23
500-141817-6	2490V2-3-B06 (10-15)	Solid	03/06/18 10:50	03/07/18 09:23
500-141817-7	2490V2-3-B07 (0-5)	Solid	03/06/18 10:00	03/07/18 09:23
500-141817-8	2490V2-3-B07 (5-10)	Solid	03/06/18 10:05	03/07/18 09:23
500-141817-9	2490V2-3-B07 (10-15)	Solid	03/06/18 10:10	03/07/18 09:23
500-141817-10	2490V2-3-B08 (0-5)	Solid	03/06/18 09:35	03/07/18 09:23
500-141817-11	2490V2-3-B09 (0-5)	Solid	03/06/18 09:25	03/07/18 09:23
500-141817-12	2490V2-3-B10 (0-5)	Solid	03/06/18 09:15	03/07/18 09:23
500-141817-13	2490V2-3-B11 (0-5)	Solid	03/06/18 12:50	03/07/18 09:23
500-141817-14	2490V2-3-B11 (5-10)	Solid	03/06/18 13:00	03/07/18 09:23
500-141817-15	2490V2-3-B11 (5-10) Dup	Solid	03/06/18 13:00	03/07/18 09:23
500-141817-16	2490V2-3-B16 (0-5)	Solid	03/06/18 11:40	03/07/18 09:23
500-141817-17	2490V2-3-B16 (5-8)	Solid	03/06/18 11:50	03/07/18 09:23
500-141817-18	2490V2-3-B17 (0-5)	Solid	03/06/18 12:00	03/07/18 09:23
500-141817-19	2490V2-3-B17 (0-5) Dup	Solid	03/06/18 12:00	03/07/18 09:23
500-141817-20	2490V2-3-B17 (5-8)	Solid	03/06/18 12:10	03/07/18 09:23
500-141817-21	2490V2-3-B18 (0-5)	Solid	03/06/18 12:20	03/07/18 09:23
500-141817-22	2490V2-3-B18 (5-8)	Solid	03/06/18 12:30	03/07/18 09:23
500-141817-23	2490V2-3-B11 (10-15)	Solid	03/06/18 13:10	03/07/18 09:23

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/09/18 18:23	1
Dibromofluoromethane	95		75 - 126	03/07/18 16:00	03/09/18 18:23	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	03/07/18 16:00	03/09/18 18:23	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/09/18 18:23	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Benzo[a]anthracene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.055</b>		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Benzo[b]fluoranthene</b>	<b>0.057</b>	<b>F1</b>	0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Benzo[g,h,i]perylene</b>	<b>0.033</b>	<b>J F1</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Benzo[k]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Chrysene</b>	<b>0.034</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Dibenz(a,h)anthracene</b>	<b>0.028</b>	<b>J F1</b>	0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4,6-Dinitro-2-methylphenol	<0.75	F1	0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4-Dinitrophenol	<0.75	F1	0.75	0.65	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Fluoranthene</b>	<b>0.050</b>		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Hexachlorocyclopentadiene	<0.75	F1	0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Hexachloroethane	<0.19	F1	0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.033</b>	<b>J F1</b>	0.037	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Phenanthrene</b>	<b>0.025</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
<b>Pyrene</b>	<b>0.049</b>		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		44 - 121	03/08/18 07:14	03/09/18 15:36	1
2-Fluorophenol	88		46 - 133	03/08/18 07:14	03/09/18 15:36	1
Nitrobenzene-d5	74		41 - 120	03/08/18 07:14	03/09/18 15:36	1
Phenol-d5	81		46 - 125	03/08/18 07:14	03/09/18 15:36	1
Terphenyl-d14	67		35 - 160	03/08/18 07:14	03/09/18 15:36	1
2,4,6-Tribromophenol	69		25 - 139	03/08/18 07:14	03/09/18 15:36	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1 F2	1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Arsenic</b>	<b>4.1</b>	<b>F1</b>	0.56	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Barium</b>	<b>45</b>		0.56	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Beryllium</b>	<b>0.42</b>		0.22	0.052	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Cadmium</b>	<b>0.17</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Chromium</b>	<b>13</b>	<b>F1 F2</b>	0.56	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Cobalt</b>	<b>9.3</b>		0.28	0.073	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Copper</b>	<b>14</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Iron</b>	<b>13000</b>	<b>F2</b>	11	5.8	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Lead</b>	<b>40</b>	<b>F2</b>	0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Magnesium</b>	<b>11000</b>	<b>F2</b>	5.6	2.8	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Calcium</b>	<b>18000</b>	<b>B F2</b>	11	1.9	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Manganese</b>	<b>620</b>		0.56	0.081	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Nickel</b>	<b>15</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Selenium</b>	<b>0.63</b>	<b>F1</b>	0.56	0.33	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Vanadium</b>	<b>20</b>	<b>F1</b>	0.28	0.066	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Zinc</b>	<b>48</b>	<b>B F1 F2</b>	1.1	0.49	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Potassium</b>	<b>800</b>	<b>F1</b>	28	9.9	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1
<b>Sodium</b>	<b>1100</b>	<b>F1</b>	56	8.2	mg/Kg	☼	03/08/18 17:14	03/13/18 00:21	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
<b>Barium</b>	<b>0.60</b>		0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:36	1
<b>Cadmium</b>	<b>0.0043</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:36	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	220		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 20:36	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Cobalt	0.086		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Copper	0.013	J	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Iron	3.8		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:36	1
Lead	0.060		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:36	1
Magnesium	87		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:36	1
Manganese	17		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Nickel	0.048		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Potassium	0.84	J	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:36	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:36	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:36	1
Zinc	0.22	J	0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:36	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.18		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 23:42	1
Manganese	0.63		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 23:42	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 18:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 18:56	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:58	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0062	mg/Kg	☼	03/08/18 14:55	03/09/18 10:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	03/08/18 15:20	03/09/18 15:31	1
pH	8.0		0.20	0.20	SU			03/13/18 13:00	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/07/18 16:00	03/09/18 18:48	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/09/18 18:48	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/09/18 18:48	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/09/18 18:48	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Anthracene</b>	<b>0.0077</b>	<b>J</b>	0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Benzo[a]anthracene</b>	<b>0.037</b>		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.063</b>		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Benzo[b]fluoranthene</b>	<b>0.072</b>		0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Benzo[g,h,i]perylene</b>	<b>0.035</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Benzo[k]fluoranthene</b>	<b>0.029</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Chrysene</b>	<b>0.041</b>		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Dibenz(a,h)anthracene</b>	<b>0.028</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Fluoranthene</b>	<b>0.10</b>		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.039</b>		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Phenanthrene</b>	<b>0.064</b>		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
<b>Pyrene</b>	<b>0.077</b>		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	89		44 - 121	03/08/18 07:14	03/09/18 16:00	1
2-Fluorophenol	102		46 - 133	03/08/18 07:14	03/09/18 16:00	1
Nitrobenzene-d5	82		41 - 120	03/08/18 07:14	03/09/18 16:00	1
Phenol-d5	81		46 - 125	03/08/18 07:14	03/09/18 16:00	1
Terphenyl-d14	77		35 - 160	03/08/18 07:14	03/09/18 16:00	1
2,4,6-Tribromophenol	58		25 - 139	03/08/18 07:14	03/09/18 16:00	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Arsenic</b>	<b>5.3</b>		0.52	0.18	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Barium</b>	<b>30</b>		0.52	0.059	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Beryllium</b>	<b>0.54</b>		0.21	0.049	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.10	0.019	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Chromium</b>	<b>14</b>		0.52	0.26	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Cobalt</b>	<b>9.3</b>		0.26	0.068	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Copper</b>	<b>18</b>		0.52	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Iron</b>	<b>14000</b>		10	5.4	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Lead</b>	<b>17</b>		0.26	0.12	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Magnesium</b>	<b>38000</b>		5.2	2.6	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Calcium</b>	<b>95000</b>	<b>B</b>	100	18	mg/Kg	☼	03/08/18 17:14	03/13/18 22:28	10
<b>Manganese</b>	<b>340</b>		0.52	0.076	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Nickel</b>	<b>21</b>		0.52	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Vanadium</b>	<b>18</b>		0.26	0.062	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Zinc</b>	<b>42</b>	<b>B</b>	1.0	0.46	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Potassium</b>	<b>1700</b>		26	9.2	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1
<b>Sodium</b>	<b>1200</b>		52	7.7	mg/Kg	☼	03/08/18 17:14	03/13/18 00:54	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Barium</b>	<b>0.27</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Cadmium</b>	<b>0.0025</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:40	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>570</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 20:40	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Manganese</b>	<b>0.70</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Nickel</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
<b>Potassium</b>	<b>0.68</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:40	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:40	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:40	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:40	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.4</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 23:46	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 18:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 18:57	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:03	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015</b>	<b>J</b>	0.017	0.0058	mg/Kg	☼	03/08/18 14:55	03/09/18 11:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	03/08/18 15:20	03/09/18 15:32	1
<b>pH</b>	<b>8.5</b>		0.20	0.20	SU			03/13/18 13:06	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.035</b>		0.016	0.0069	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
<b>2-Butanone (MEK)</b>	<b>0.0078</b>		0.0040	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Chloroethane	<0.0040 *		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
<b>Toluene</b>	<b>0.0011 J</b>		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/07/18 16:00	03/09/18 19:13	1
Dibromofluoromethane	94		75 - 126	03/07/18 16:00	03/09/18 19:13	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/09/18 19:13	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/09/18 19:13	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
<b>Anthracene</b>	<b>0.014 J</b>		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
<b>Benzo[a]anthracene</b>	<b>0.096</b>		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.15		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Benzo[b]fluoranthene	0.28		0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Benzo[g,h,i]perylene	0.081		0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Benzo[k]fluoranthene	0.10		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Chrysene	0.13		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Dibenz(a,h)anthracene	0.036	J	0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Fluoranthene	0.24		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Fluorene	0.0053	J	0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Indeno[1,2,3-cd]pyrene	0.071		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

Date Collected: 03/06/18 10:30

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 85.8

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
<b>Phenanthrene</b>	<b>0.10</b>		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
<b>Pyrene</b>	<b>0.25</b>		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 18:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	94		44 - 121				03/08/18 07:14	03/09/18 18:27	1
2-Fluorophenol	99		46 - 133				03/08/18 07:14	03/09/18 18:27	1
Nitrobenzene-d5	82		41 - 120				03/08/18 07:14	03/09/18 18:27	1
Phenol-d5	88		46 - 125				03/08/18 07:14	03/09/18 18:27	1
Terphenyl-d14	105		35 - 160				03/08/18 07:14	03/09/18 18:27	1
2,4,6-Tribromophenol	75		25 - 139				03/08/18 07:14	03/09/18 18:27	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.30</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Arsenic</b>	<b>5.1</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Barium</b>	<b>39</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Beryllium</b>	<b>0.50</b>		0.22	0.052	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Cadmium</b>	<b>0.15</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Chromium</b>	<b>13</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Cobalt</b>	<b>8.4</b>		0.28	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Copper</b>	<b>16</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Iron</b>	<b>14000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Lead</b>	<b>22</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Magnesium</b>	<b>21000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Calcium</b>	<b>56000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:32	10
<b>Manganese</b>	<b>340</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Nickel</b>	<b>18</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Selenium</b>	<b>0.38</b>	<b>J</b>	0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Vanadium</b>	<b>20</b>		0.28	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Zinc</b>	<b>46</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Potassium</b>	<b>1200</b>		28	9.8	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1
<b>Sodium</b>	<b>1400</b>		55	8.2	mg/Kg	☼	03/08/18 17:14	03/13/18 00:59	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Barium</b>	<b>0.40</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>440</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 20:44	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Cobalt</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Lead</b>	<b>0.0091</b>		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Manganese</b>	<b>4.7</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Nickel</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Potassium</b>	<b>0.82</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:44	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:44	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:44	1
<b>Zinc</b>	<b>0.036</b>	<b>J</b>	0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:44	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.18</b>		0.0075	0.0075	mg/L		03/13/18 06:45	03/14/18 00:00	1
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:00	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 18:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 18:58	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:08	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.020</b>		0.018	0.0059	mg/Kg	☼	03/08/18 14:55	03/09/18 11:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	03/08/18 15:20	03/09/18 15:32	1
<b>pH</b>	<b>8.2</b>		0.20	0.20	SU			03/13/18 13:09	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.5**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.025</b>		0.016	0.0071	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
<b>2-Butanone (MEK)</b>	<b>0.0056</b>		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
<b>Toluene</b>	<b>0.0012</b>	<b>J</b>	0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/07/18 16:00	03/09/18 19:39	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/09/18 19:39	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/09/18 19:39	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/09/18 19:39	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
<b>Benzo[a]anthracene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.052		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Benzo[b]fluoranthene	0.061		0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Benzo[g,h,i]perylene	0.034	J	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Benzo[k]fluoranthene	0.020	J	0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Chrysene	0.031	J	0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Fluoranthene	0.048		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Indeno[1,2,3-cd]pyrene	0.037		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
<b>Phenanthrene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
<b>Pyrene</b>	<b>0.040</b>		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	03/08/18 07:14	03/09/18 16:25	1
2-Fluorophenol	98		46 - 133	03/08/18 07:14	03/09/18 16:25	1
Nitrobenzene-d5	81		41 - 120	03/08/18 07:14	03/09/18 16:25	1
Phenol-d5	84		46 - 125	03/08/18 07:14	03/09/18 16:25	1
Terphenyl-d14	77		35 - 160	03/08/18 07:14	03/09/18 16:25	1
2,4,6-Tribromophenol	70		25 - 139	03/08/18 07:14	03/09/18 16:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Arsenic</b>	<b>2.5</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Barium</b>	<b>40</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Beryllium</b>	<b>0.67</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Cadmium</b>	<b>0.084</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Chromium</b>	<b>17</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Cobalt</b>	<b>9.6</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Copper</b>	<b>14</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Iron</b>	<b>15000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Lead</b>	<b>16</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Magnesium</b>	<b>22000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Calcium</b>	<b>49000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:36	10
<b>Manganese</b>	<b>190</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Nickel</b>	<b>24</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
Silver	<0.27		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Vanadium</b>	<b>23</b>		0.27	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Zinc</b>	<b>43</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Potassium</b>	<b>1600</b>		27	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1
<b>Sodium</b>	<b>1400</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 01:03	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Barium</b>	<b>0.40</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:48	1

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>370</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 20:48	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Cobalt</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Magnesium</b>	<b>160</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Manganese</b>	<b>4.5</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Potassium</b>	<b>0.69</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:48	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:48	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:48	1
<b>Zinc</b>	<b>0.022</b>	<b>J</b>	0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:48	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:05	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 18:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 18:59	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:10	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.017</b>	<b>J</b>	0.019	0.0063	mg/Kg	☼	03/08/18 14:55	03/09/18 11:10	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/13/18 11:20	03/13/18 15:01	1
<b>pH</b>	<b>8.2</b>		0.20	0.20	SU			03/13/18 13:12	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.6**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 20:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/09/18 20:04	1
Dibromofluoromethane	96		75 - 126	03/07/18 16:00	03/09/18 20:04	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/09/18 20:04	1
Toluene-d8 (Surr)	101		75 - 124	03/07/18 16:00	03/09/18 20:04	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
<b>Benzo[g,h,i]perylene</b>	<b>0.026</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.6**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
<b>Phenanthrene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
<b>Pyrene</b>	<b>0.0096</b>	<b>J</b>	0.037	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	03/08/18 07:14	03/09/18 13:34	1
2-Fluorophenol	101		46 - 133	03/08/18 07:14	03/09/18 13:34	1
Nitrobenzene-d5	86		41 - 120	03/08/18 07:14	03/09/18 13:34	1
Phenol-d5	93		46 - 125	03/08/18 07:14	03/09/18 13:34	1
Terphenyl-d14	70		35 - 160	03/08/18 07:14	03/09/18 13:34	1
2,4,6-Tribromophenol	66		25 - 139	03/08/18 07:14	03/09/18 13:34	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.23</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Arsenic</b>	<b>4.6</b>		0.57	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Barium</b>	<b>28</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Beryllium</b>	<b>0.58</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Cadmium</b>	<b>0.061</b>	<b>J B</b>	0.11	0.021	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Chromium</b>	<b>14</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Cobalt</b>	<b>10</b>		0.29	0.075	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Copper</b>	<b>16</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Iron</b>	<b>17000</b>		11	6.0	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Lead</b>	<b>9.5</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Magnesium</b>	<b>33000</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:40	10
<b>Manganese</b>	<b>340</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Nickel</b>	<b>25</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Vanadium</b>	<b>16</b>		0.29	0.068	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Zinc</b>	<b>46</b>	<b>B</b>	1.1	0.50	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Potassium</b>	<b>2200</b>		29	10	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1
<b>Sodium</b>	<b>580</b>		57	8.5	mg/Kg	☼	03/08/18 17:14	03/13/18 01:08	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
<b>Barium</b>	<b>0.49</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:53	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>960</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:31	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:53	1
<b>Magnesium</b>	<b>48</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:53	1
<b>Manganese</b>	<b>2.5</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
<b>Nickel</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
<b>Potassium</b>	<b>2.8</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:53	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:53	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:53	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:53	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.29</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:10	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:00	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:11	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.012</b>	<b>J</b>	0.019	0.0063	mg/Kg	☼	03/08/18 14:55	03/09/18 11:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	03/13/18 11:20	03/13/18 15:02	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:16	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.0**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/09/18 20:29	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/09/18 20:29	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/09/18 20:29	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/09/18 20:29	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
<b>Benzo[g,h,i]perylene</b>	<b>0.026</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
<b>2-Methylnaphthalene</b>	<b>0.0085</b>	<b>J</b>	0.076	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
<b>Phenanthrene</b>	<b>0.027</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		44 - 121	03/08/18 07:14	03/09/18 13:58	1
2-Fluorophenol	99		46 - 133	03/08/18 07:14	03/09/18 13:58	1
Nitrobenzene-d5	85		41 - 120	03/08/18 07:14	03/09/18 13:58	1
Phenol-d5	88		46 - 125	03/08/18 07:14	03/09/18 13:58	1
Terphenyl-d14	69		35 - 160	03/08/18 07:14	03/09/18 13:58	1
2,4,6-Tribromophenol	65		25 - 139	03/08/18 07:14	03/09/18 13:58	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Arsenic</b>	<b>4.9</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Barium</b>	<b>28</b>		0.55	0.062	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Beryllium</b>	<b>0.54</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Cadmium</b>	<b>0.096</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Chromium</b>	<b>13</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Cobalt</b>	<b>10</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Copper</b>	<b>36</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Iron</b>	<b>16000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Lead</b>	<b>9.7</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Magnesium</b>	<b>35000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Calcium</b>	<b>110000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:44	10
<b>Manganese</b>	<b>360</b>		0.55	0.079	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Nickel</b>	<b>24</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Selenium</b>	<b>0.60</b>		0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
Silver	<0.27		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Vanadium</b>	<b>15</b>		0.27	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Zinc</b>	<b>42</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Potassium</b>	<b>2200</b>		27	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1
<b>Sodium</b>	<b>180</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 01:13	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
<b>Barium</b>	<b>0.53</b>		0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:57	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.0**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	840		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:35	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Cobalt	0.020	J	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Copper	0.010	J	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:57	1
Magnesium	36		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:57	1
Manganese	2.0		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Nickel	0.052		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Potassium	4.5		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:57	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:57	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:57	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:57	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:14	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:13	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.017	0.0058	mg/Kg	☼	03/08/18 14:55	03/09/18 11:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	03/13/18 11:20	03/13/18 15:02	1
pH	7.8		0.20	0.20	SU			03/13/18 13:19	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.9**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.011</b>	<b>J</b>	0.016	0.0071	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 18:05	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/10/18 18:05	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/10/18 18:05	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 18:05	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Anthracene</b>	<b>0.010</b>	<b>J</b>	0.035	0.0060	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Benzo[a]anthracene</b>	<b>0.081</b>		0.035	0.0048	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.12</b>		0.035	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Benzo[b]fluoranthene</b>	<b>0.22</b>		0.035	0.0077	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Benzo[g,h,i]perylene</b>	<b>0.069</b>		0.035	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Benzo[k]fluoranthene</b>	<b>0.083</b>		0.035	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Chrysene</b>	<b>0.10</b>		0.035	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Dibenz(a,h)anthracene</b>	<b>0.034 J</b>		0.035	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Fluoranthene</b>	<b>0.17</b>		0.035	0.0066	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.067</b>		0.035	0.0092	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.9**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Phenanthrene</b>	<b>0.059</b>		0.035	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
<b>Pyrene</b>	<b>0.20</b>		0.035	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		44 - 121	03/08/18 07:14	03/09/18 18:51	1
2-Fluorophenol	101		46 - 133	03/08/18 07:14	03/09/18 18:51	1
Nitrobenzene-d5	84		41 - 120	03/08/18 07:14	03/09/18 18:51	1
Phenol-d5	86		46 - 125	03/08/18 07:14	03/09/18 18:51	1
Terphenyl-d14	113		35 - 160	03/08/18 07:14	03/09/18 18:51	1
2,4,6-Tribromophenol	78		25 - 139	03/08/18 07:14	03/09/18 18:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Arsenic</b>	<b>4.6</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Barium</b>	<b>51</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Beryllium</b>	<b>0.53</b>		0.22	0.052	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Cadmium</b>	<b>0.14</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Chromium</b>	<b>14</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Cobalt</b>	<b>8.2</b>		0.28	0.073	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Copper</b>	<b>15</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Iron</b>	<b>14000</b>		11	5.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Lead</b>	<b>30</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Magnesium</b>	<b>21000</b>		5.6	2.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Calcium</b>	<b>52000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:48	10
<b>Manganese</b>	<b>500</b>		0.56	0.081	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Nickel</b>	<b>18</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Selenium</b>	<b>0.52</b>	<b>J</b>	0.56	0.33	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Vanadium</b>	<b>22</b>		0.28	0.066	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Zinc</b>	<b>47</b>	<b>B</b>	1.1	0.49	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Potassium</b>	<b>1200</b>		28	9.9	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1
<b>Sodium</b>	<b>1700</b>		56	8.2	mg/Kg	☼	03/08/18 17:14	03/13/18 01:18	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Barium</b>	<b>0.49</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Cadmium</b>	<b>0.0031</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>350</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:01	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Cobalt</b>	<b>0.033</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Lead</b>	<b>0.010</b>		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Manganese</b>	<b>10</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Nickel</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Potassium</b>	<b>0.79</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:01	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:01	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:01	1
<b>Zinc</b>	<b>0.032</b>	<b>J</b>	0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:01	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.24</b>		0.0075	0.0075	mg/L		03/13/18 06:45	03/14/18 00:33	1
<b>Manganese</b>	<b>1.8</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:33	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:14	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.014</b>	<b>J</b>	0.017	0.0056	mg/Kg	☼	03/08/18 14:55	03/09/18 11:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	03/13/18 11:20	03/13/18 15:03	1
<b>pH</b>	<b>8.3</b>		0.20	0.20	SU			03/13/18 13:22	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.1**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 18:31	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 18:31	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/07/18 16:00	03/10/18 18:31	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 18:31	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
<b>Anthracene</b>	<b>0.0070</b>	<b>J</b>	0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
<b>Benzo[a]anthracene</b>	<b>0.044</b>		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.080		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Benzo[b]fluoranthene	0.13		0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Benzo[g,h,i]perylene	0.043		0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Benzo[k]fluoranthene	0.036	J	0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Chrysene	0.070		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Dibenz(a,h)anthracene	0.029	J	0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Fluoranthene	0.12		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Indeno[1,2,3-cd]pyrene	0.051		0.037	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.1**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
<b>Phenanthrene</b>	<b>0.054</b>		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
<b>Pyrene</b>	<b>0.11</b>		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		44 - 121	03/08/18 07:14	03/09/18 18:02	1
2-Fluorophenol	105		46 - 133	03/08/18 07:14	03/09/18 18:02	1
Nitrobenzene-d5	84		41 - 120	03/08/18 07:14	03/09/18 18:02	1
Phenol-d5	86		46 - 125	03/08/18 07:14	03/09/18 18:02	1
Terphenyl-d14	91		35 - 160	03/08/18 07:14	03/09/18 18:02	1
2,4,6-Tribromophenol	72		25 - 139	03/08/18 07:14	03/09/18 18:02	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Arsenic</b>	<b>5.5</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Barium</b>	<b>26</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Beryllium</b>	<b>0.59</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Cadmium</b>	<b>0.078</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Chromium</b>	<b>15</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Cobalt</b>	<b>7.3</b>		0.28	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Copper</b>	<b>19</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Iron</b>	<b>17000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Lead</b>	<b>9.6</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Magnesium</b>	<b>32000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 22:52	10
<b>Manganese</b>	<b>280</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Nickel</b>	<b>23</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Selenium</b>	<b>0.34</b>	<b>J</b>	0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Vanadium</b>	<b>17</b>		0.28	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Zinc</b>	<b>47</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Potassium</b>	<b>2100</b>		28	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1
<b>Sodium</b>	<b>370</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 01:22	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
<b>Barium</b>	<b>0.25</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:05	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>870</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:40	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:05	1
<b>Magnesium</b>	<b>42</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:05	1
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
<b>Potassium</b>	<b>1.9 J</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:05	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:05	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:05	1
<b>Zinc</b>	<b>0.022 J</b>		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:05	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:38	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:02	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:16	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.018</b>		0.017	0.0057	mg/Kg	☼	03/08/18 14:55	03/09/18 11:24	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.27 J</b>		0.55	0.19	mg/Kg	☼	03/13/18 11:20	03/13/18 15:03	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:25	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0080	J	0.015	0.0065	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/10/18 18:56	1
Dibromofluoromethane	89		75 - 126	03/07/18 16:00	03/10/18 18:56	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/07/18 16:00	03/10/18 18:56	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 18:56	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>Benzo[g,h,i]perylene</b>	<b>0.027</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>2-Methylnaphthalene</b>	<b>0.039</b>	<b>J</b>	0.074	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>Naphthalene</b>	<b>0.0073</b>	<b>J</b>	0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>Phenanthrene</b>	<b>0.044</b>		0.037	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>Pyrene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 14:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	96		44 - 121				03/08/18 07:14	03/09/18 14:23	1
2-Fluorophenol	111		46 - 133				03/08/18 07:14	03/09/18 14:23	1
Nitrobenzene-d5	90		41 - 120				03/08/18 07:14	03/09/18 14:23	1
Phenol-d5	101		46 - 125				03/08/18 07:14	03/09/18 14:23	1
Terphenyl-d14	74		35 - 160				03/08/18 07:14	03/09/18 14:23	1
2,4,6-Tribromophenol	65		25 - 139				03/08/18 07:14	03/09/18 14:23	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Arsenic</b>	<b>4.6</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Barium</b>	<b>25</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Beryllium</b>	<b>0.48</b>		0.22	0.050	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Cadmium</b>	<b>0.088</b>	<b>J B</b>	0.11	0.019	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Chromium</b>	<b>12</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Cobalt</b>	<b>11</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Copper</b>	<b>18</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Iron</b>	<b>14000</b>		11	5.6	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Lead</b>	<b>9.6</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Magnesium</b>	<b>41000</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Calcium</b>	<b>110000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:14	03/13/18 23:04	10
<b>Manganese</b>	<b>350</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Nickel</b>	<b>25</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Vanadium</b>	<b>14</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Zinc</b>	<b>45</b>	<b>B</b>	1.1	0.47	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Potassium</b>	<b>1900</b>		27	9.5	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1
<b>Sodium</b>	<b>160</b>		54	8.0	mg/Kg	☼	03/08/18 17:14	03/13/18 01:36	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Barium</b>	<b>0.56</b>		0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:09	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:09	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>730</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:45	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Cobalt</b>	<b>0.041</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Magnesium</b>	<b>49</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Manganese</b>	<b>2.3</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Nickel</b>	<b>0.084</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
<b>Potassium</b>	<b>4.4</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:09	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:09	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:09	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:09	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.11</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:42	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:06	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:18	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.019	0.0064	mg/Kg	☼	03/08/18 14:55	03/09/18 11:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	03/13/18 11:20	03/13/18 15:04	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:28	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

Date Collected: 03/06/18 09:35

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 85.3

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
<b>Carbon tetrachloride</b>	<b>0.00098</b>	<b>J</b>	0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 19:21	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/10/18 19:21	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/10/18 19:21	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 19:21	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Benzo[a]anthracene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.033</b>	<b>J</b>	0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Benzo[b]fluoranthene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Benzo[g,h,i]perylene</b>	<b>0.022</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Benzo[k]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Fluoranthene</b>	<b>0.029</b>	<b>J</b>	0.037	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.029</b>	<b>J</b>	0.037	0.0098	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Phenanthrene</b>	<b>0.017</b>	<b>J</b>	0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Pyrene</b>	<b>0.022</b>	<b>J</b>	0.037	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 14:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	91		44 - 121				03/08/18 07:14	03/09/18 14:47	1
2-Fluorophenol	101		46 - 133				03/08/18 07:14	03/09/18 14:47	1
Nitrobenzene-d5	86		41 - 120				03/08/18 07:14	03/09/18 14:47	1
Phenol-d5	82		46 - 125				03/08/18 07:14	03/09/18 14:47	1
Terphenyl-d14	76		35 - 160				03/08/18 07:14	03/09/18 14:47	1
2,4,6-Tribromophenol	68		25 - 139				03/08/18 07:14	03/09/18 14:47	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.22</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Arsenic</b>	<b>5.5</b>		0.57	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Barium</b>	<b>54</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Beryllium</b>	<b>0.55</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Cadmium</b>	<b>0.048</b>	<b>J B</b>	0.11	0.021	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Chromium</b>	<b>14</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Cobalt</b>	<b>8.0</b>		0.29	0.075	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Copper</b>	<b>12</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Iron</b>	<b>16000</b>		11	5.9	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Lead</b>	<b>11</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Magnesium</b>	<b>8300</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Calcium</b>	<b>14000</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Manganese</b>	<b>450</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Nickel</b>	<b>14</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Vanadium</b>	<b>24</b>		0.29	0.067	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Zinc</b>	<b>39</b>	<b>B</b>	1.1	0.50	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Potassium</b>	<b>760</b>		29	10	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1
<b>Sodium</b>	<b>1600</b>		57	8.4	mg/Kg	☼	03/08/18 17:14	03/13/18 01:41	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
<b>Barium</b>	<b>0.38</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:14	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>360</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:14	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:14	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:14	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
<b>Potassium</b>	<b>0.51 J</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:14	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:14	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:14	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:14	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.6</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 00:57	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:07	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:19	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.039</b>		0.018	0.0059	mg/Kg	☼	03/08/18 14:55	03/09/18 11:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/13/18 11:20	03/13/18 15:04	1
<b>pH</b>	<b>8.3</b>		0.20	0.20	SU			03/13/18 13:32	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.028</b>		0.015	0.0066	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
<b>2-Butanone (MEK)</b>	<b>0.0049</b>		0.0038	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Chloroethane	<0.0038 *		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 19:46	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 19:46	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/10/18 19:46	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 19:46	1

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Benzo[a]anthracene</b>	<b>0.047</b>		0.038	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.078</b>		0.038	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Benzo[b]fluoranthene</b>	<b>0.11</b>		0.038	0.0083	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Benzo[g,h,i]perylene</b>	<b>0.044</b>		0.038	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Benzo[k]fluoranthene</b>	<b>0.046</b>		0.038	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Chrysene</b>	<b>0.061</b>		0.038	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Fluoranthene</b>	<b>0.11</b>		0.038	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.046</b>		0.038	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

Date Collected: 03/06/18 09:25

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 85.8

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Phenanthrene</b>	<b>0.043</b>		0.038	0.0054	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
<b>Pyrene</b>	<b>0.097</b>		0.038	0.0077	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		44 - 121	03/08/18 07:14	03/09/18 16:49	1
2-Fluorophenol	103		46 - 133	03/08/18 07:14	03/09/18 16:49	1
Nitrobenzene-d5	86		41 - 120	03/08/18 07:14	03/09/18 16:49	1
Phenol-d5	85		46 - 125	03/08/18 07:14	03/09/18 16:49	1
Terphenyl-d14	83		35 - 160	03/08/18 07:14	03/09/18 16:49	1
2,4,6-Tribromophenol	72		25 - 139	03/08/18 07:14	03/09/18 16:49	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Arsenic</b>	<b>5.3</b>		0.57	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Barium</b>	<b>41</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Beryllium</b>	<b>0.52</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Cadmium</b>	<b>0.13</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Chromium</b>	<b>13</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Cobalt</b>	<b>8.5</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Copper</b>	<b>17</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Iron</b>	<b>15000</b>		11	5.9	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Lead</b>	<b>21</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Magnesium</b>	<b>22000</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Calcium</b>	<b>65000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 23:08	10
<b>Manganese</b>	<b>320</b>		0.57	0.082	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Nickel</b>	<b>20</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Selenium</b>	<b>0.41</b>	<b>J</b>	0.57	0.33	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Vanadium</b>	<b>21</b>		0.28	0.067	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Zinc</b>	<b>50</b>	<b>B</b>	1.1	0.50	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Potassium</b>	<b>1200</b>		28	10	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1
<b>Sodium</b>	<b>1600</b>		57	8.4	mg/Kg	☼	03/08/18 17:14	03/13/18 01:46	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Cadmium</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>390</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:26	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Cobalt</b>	<b>0.030</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Magnesium</b>	<b>83</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Manganese</b>	<b>6.1</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Nickel</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
<b>Potassium</b>	<b>0.80</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:26	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:26	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:26	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:26	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>2.5</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:01	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:08	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:21	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.018</b>	<b>J</b>	0.019	0.0062	mg/Kg	☼	03/08/18 14:55	03/09/18 11:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/13/18 11:20	03/13/18 15:05	1
<b>pH</b>	<b>8.6</b>		0.20	0.20	SU			03/13/18 13:35	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

Client Sample ID: 2490V2-3-B10 (0-5)

Lab Sample ID: 500-141817-12

Date Collected: 03/06/18 09:15

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 87.2

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.017		0.015	0.0066	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
2-Butanone (MEK)	0.0031	J	0.0038	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 20:12	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 20:12	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/10/18 20:12	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 20:12	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

**Date Collected: 03/06/18 09:15**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
<b>Benzo[g,h,i]perylene</b>	<b>0.016</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

**Date Collected: 03/06/18 09:15**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 11:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	113		44 - 121				03/08/18 07:14	03/09/18 11:57	1
2-Fluorophenol	128		46 - 133				03/08/18 07:14	03/09/18 11:57	1
Nitrobenzene-d5	111		41 - 120				03/08/18 07:14	03/09/18 11:57	1
Phenol-d5	111		46 - 125				03/08/18 07:14	03/09/18 11:57	1
Terphenyl-d14	93		35 - 160				03/08/18 07:14	03/09/18 11:57	1
2,4,6-Tribromophenol	83		25 - 139				03/08/18 07:14	03/09/18 11:57	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Arsenic</b>	<b>4.9</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Barium</b>	<b>26</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Beryllium</b>	<b>0.52</b>		0.22	0.052	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Cadmium</b>	<b>0.77</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Chromium</b>	<b>13</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Cobalt</b>	<b>9.2</b>		0.28	0.073	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Copper</b>	<b>20</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Iron</b>	<b>15000</b>		11	5.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Lead</b>	<b>22</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Magnesium</b>	<b>36000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Calcium</b>	<b>110000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 23:12	10
<b>Manganese</b>	<b>330</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Nickel</b>	<b>22</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
Silver	<0.28		0.28	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Vanadium</b>	<b>18</b>		0.28	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Zinc</b>	<b>54</b>	<b>B</b>	1.1	0.49	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Potassium</b>	<b>1600</b>		28	9.8	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1
<b>Sodium</b>	<b>1100</b>		55	8.2	mg/Kg	☼	03/08/18 17:14	03/13/18 01:51	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Barium</b>	<b>0.31</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Cadmium</b>	<b>0.0030</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:30	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

Date Collected: 03/06/18 09:15

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 87.2

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>450</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:30	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Cobalt</b>	<b>0.024</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Magnesium</b>	<b>86</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Manganese</b>	<b>4.5</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Nickel</b>	<b>0.019</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
<b>Potassium</b>	<b>1.1</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:30	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:30	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:30	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:30	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>2.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:06	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:09	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:22	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015</b>	<b>J</b>	0.017	0.0057	mg/Kg	☼	03/08/18 14:55	03/09/18 11:33	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.34</b>	<b>J</b>	0.57	0.20	mg/Kg	☼	03/13/18 11:20	03/13/18 15:05	1
<b>pH</b>	<b>8.4</b>		0.20	0.20	SU			03/13/18 13:38	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 82.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	03/07/18 16:00	03/10/18 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 20:37	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 20:37	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	03/07/18 16:00	03/10/18 20:37	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/10/18 20:37	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 82.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.024</b>	<b>J</b>	0.039	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
<b>Benzo[g,h,i]perylene</b>	<b>0.018</b>	<b>J</b>	0.039	0.013	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 82.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 12:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		44 - 121	03/08/18 07:14	03/09/18 12:21	1
2-Fluorophenol	103		46 - 133	03/08/18 07:14	03/09/18 12:21	1
Nitrobenzene-d5	84		41 - 120	03/08/18 07:14	03/09/18 12:21	1
Phenol-d5	83		46 - 125	03/08/18 07:14	03/09/18 12:21	1
Terphenyl-d14	77		35 - 160	03/08/18 07:14	03/09/18 12:21	1
2,4,6-Tribromophenol	72		25 - 139	03/08/18 07:14	03/09/18 12:21	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Arsenic</b>	<b>6.4</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Barium</b>	<b>54</b>		0.58	0.066	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Beryllium</b>	<b>0.83</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Cadmium</b>	<b>0.047</b>	<b>J B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Chromium</b>	<b>19</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Cobalt</b>	<b>11</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Copper</b>	<b>18</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Iron</b>	<b>21000</b>		12	6.0	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Lead</b>	<b>14</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Magnesium</b>	<b>10000</b>		5.8	2.9	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Calcium</b>	<b>15000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Manganese</b>	<b>400</b>		0.58	0.084	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Nickel</b>	<b>33</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Selenium</b>	<b>0.75</b>		0.58	0.34	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Vanadium</b>	<b>22</b>		0.29	0.068	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Zinc</b>	<b>53</b>	<b>B</b>	1.2	0.51	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Potassium</b>	<b>1300</b>		29	10	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1
<b>Sodium</b>	<b>3000</b>		58	8.5	mg/Kg	☼	03/08/18 17:14	03/13/18 01:55	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
<b>Barium</b>	<b>0.27</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:34	1
<b>Cadmium</b>	<b>0.0021</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:34	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 82.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>420</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:34	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:34	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:34	1
<b>Manganese</b>	<b>0.57</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
<b>Potassium</b>	<b>0.93 J</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:34	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:34	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:34	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:34	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:10	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:09	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:27	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.031</b>		0.019	0.0064	mg/Kg	☼	03/08/18 14:55	03/09/18 11:35	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	03/13/18 11:20	03/13/18 15:05	1
<b>pH</b>	<b>8.4</b>		0.20	0.20	SU			03/13/18 13:41	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	03/07/18 16:00	03/12/18 15:12	1
Dibromofluoromethane	90		75 - 126	03/07/18 16:00	03/12/18 15:12	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/12/18 15:12	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/12/18 15:12	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
<b>Benzo[g,h,i]perylene</b>	<b>0.024</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
<b>Pyrene</b>	<b>0.0075</b>	<b>J</b>	0.037	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 12:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		44 - 121	03/08/18 07:14	03/09/18 12:45	1
2-Fluorophenol	107		46 - 133	03/08/18 07:14	03/09/18 12:45	1
Nitrobenzene-d5	87		41 - 120	03/08/18 07:14	03/09/18 12:45	1
Phenol-d5	90		46 - 125	03/08/18 07:14	03/09/18 12:45	1
Terphenyl-d14	75		35 - 160	03/08/18 07:14	03/09/18 12:45	1
2,4,6-Tribromophenol	66		25 - 139	03/08/18 07:14	03/09/18 12:45	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Arsenic</b>	<b>5.6</b>		0.57	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Barium</b>	<b>28</b>		0.57	0.066	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Beryllium</b>	<b>0.57</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Cadmium</b>	<b>0.085</b>	<b>J B</b>	0.11	0.021	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Chromium</b>	<b>14</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Cobalt</b>	<b>10</b>		0.29	0.075	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Copper</b>	<b>18</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Iron</b>	<b>16000</b>		11	6.0	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Lead</b>	<b>9.2</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Magnesium</b>	<b>33000</b>		5.7	2.9	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Calcium</b>	<b>95000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 23:16	10
<b>Manganese</b>	<b>320</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Nickel</b>	<b>25</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Selenium</b>	<b>0.58</b>		0.57	0.34	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Vanadium</b>	<b>18</b>		0.29	0.068	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Zinc</b>	<b>46</b>	<b>B</b>	1.1	0.50	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Potassium</b>	<b>2300</b>		29	10	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1
<b>Sodium</b>	<b>560</b>		57	8.5	mg/Kg	☼	03/08/18 17:14	03/13/18 02:00	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
<b>Barium</b>	<b>0.25</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:38	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>740</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:50	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:38	1
<b>Magnesium</b>	<b>43</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:38	1
<b>Manganese</b>	<b>1.4</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
<b>Potassium</b>	<b>1.7 J</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:38	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:38	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:38	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:38	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.27</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:15	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:10	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:29	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013 J</b>		0.019	0.0065	mg/Kg	☼	03/08/18 14:55	03/09/18 11:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	03/15/18 10:15	03/15/18 15:37	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:45	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/12/18 15:37	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/12/18 15:37	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/07/18 16:00	03/12/18 15:37	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/12/18 15:37	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
<b>Benzo[g,h,i]perylene</b>	<b>0.025</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
<b>Chrysene</b>	<b>0.012</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
<b>Phenanthrene</b>	<b>0.0059</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
<b>Pyrene</b>	<b>0.010</b>	<b>J</b>	0.037	0.0075	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		44 - 121	03/08/18 07:14	03/09/18 13:10	1
2-Fluorophenol	102		46 - 133	03/08/18 07:14	03/09/18 13:10	1
Nitrobenzene-d5	86		41 - 120	03/08/18 07:14	03/09/18 13:10	1
Phenol-d5	96		46 - 125	03/08/18 07:14	03/09/18 13:10	1
Terphenyl-d14	73		35 - 160	03/08/18 07:14	03/09/18 13:10	1
2,4,6-Tribromophenol	61		25 - 139	03/08/18 07:14	03/09/18 13:10	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Arsenic</b>	<b>4.3</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Barium</b>	<b>23</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Beryllium</b>	<b>0.50</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Cadmium</b>	<b>0.078</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Chromium</b>	<b>12</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Cobalt</b>	<b>6.7</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Copper</b>	<b>15</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Iron</b>	<b>13000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Lead</b>	<b>6.2</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Magnesium</b>	<b>31000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Calcium</b>	<b>180000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 23:20	10
<b>Manganese</b>	<b>270</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Nickel</b>	<b>21</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
Silver	<0.27		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Vanadium</b>	<b>15</b>		0.27	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Zinc</b>	<b>40</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Potassium</b>	<b>2100</b>		27	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1
<b>Sodium</b>	<b>560</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 02:05	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Barium</b>	<b>0.27</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:43	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>820</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:54	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Magnesium</b>	<b>45</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Manganese</b>	<b>1.6</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Nickel</b>	<b>0.010</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
<b>Potassium</b>	<b>2.1</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:43	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:43	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:43	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:43	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.33</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:20	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:11	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:31	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.011</b>	<b>J</b>	0.019	0.0062	mg/Kg	☼	03/08/18 14:55	03/09/18 11:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	03/15/18 10:15	03/15/18 15:37	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:48	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.1**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.011</b>	<b>J</b>	0.015	0.0066	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/07/18 16:00	03/12/18 16:02	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/12/18 16:02	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/12/18 16:02	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/12/18 16:02	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.025</b>	<b>J</b>	0.038	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
<b>Benzo[g,h,i]perylene</b>	<b>0.017</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		44 - 121	03/08/18 07:14	03/09/18 15:12	1
2-Fluorophenol	105		46 - 133	03/08/18 07:14	03/09/18 15:12	1
Nitrobenzene-d5	91		41 - 120	03/08/18 07:14	03/09/18 15:12	1
Phenol-d5	89		46 - 125	03/08/18 07:14	03/09/18 15:12	1
Terphenyl-d14	77		35 - 160	03/08/18 07:14	03/09/18 15:12	1
2,4,6-Tribromophenol	71		25 - 139	03/08/18 07:14	03/09/18 15:12	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Arsenic</b>	<b>6.7</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Barium</b>	<b>44</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Beryllium</b>	<b>0.82</b>		0.22	0.050	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Chromium</b>	<b>21</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Cobalt</b>	<b>12</b>		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Copper</b>	<b>22</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Iron</b>	<b>23000</b>		11	5.6	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Lead</b>	<b>14</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Magnesium</b>	<b>8500</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Calcium</b>	<b>11000</b>	<b>B</b>	11	1.8	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Manganese</b>	<b>220</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Nickel</b>	<b>30</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Selenium</b>	<b>0.87</b>		0.54	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Vanadium</b>	<b>26</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Zinc</b>	<b>52</b>	<b>B</b>	1.1	0.47	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Potassium</b>	<b>1900</b>		27	9.5	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1
<b>Sodium</b>	<b>1200</b>		54	8.0	mg/Kg	☼	03/08/18 17:14	03/13/18 02:10	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Barium</b>	<b>0.35</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:47	1

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>310</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:47	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Cobalt</b>	<b>0.019</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Manganese</b>	<b>4.4</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Nickel</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
<b>Potassium</b>	<b>1.3</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:47	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:47	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:47	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:47	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.5</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:25	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:12	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:32	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.018	0.0060	mg/Kg	☼	03/08/18 14:55	03/09/18 11:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	03/15/18 10:15	03/15/18 15:38	1
<b>pH</b>	<b>7.8</b>		0.20	0.20	SU			03/13/18 13:51	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.5**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
<b>Carbon tetrachloride</b>	<b>0.00095</b>	<b>J</b>	0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/12/18 16:28	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/12/18 16:28	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/07/18 16:00	03/12/18 16:28	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/12/18 16:28	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1

TestAmerica Chicago

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TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Phenol	<0.18		0.18	0.082	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 11:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		44 - 121	03/08/18 07:14	03/09/18 11:32	1
2-Fluorophenol	104		46 - 133	03/08/18 07:14	03/09/18 11:32	1
Nitrobenzene-d5	89		41 - 120	03/08/18 07:14	03/09/18 11:32	1
Phenol-d5	98		46 - 125	03/08/18 07:14	03/09/18 11:32	1
Terphenyl-d14	75		35 - 160	03/08/18 07:14	03/09/18 11:32	1
2,4,6-Tribromophenol	67		25 - 139	03/08/18 07:14	03/09/18 11:32	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Arsenic</b>	<b>5.3</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Barium</b>	<b>39</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Beryllium</b>	<b>0.68</b>		0.22	0.050	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.11	0.019	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Chromium</b>	<b>16</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Cobalt</b>	<b>14</b>		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Copper</b>	<b>18</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Iron</b>	<b>17000</b>		11	5.6	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Lead</b>	<b>9.9</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Magnesium</b>	<b>28000</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Calcium</b>	<b>85000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:14	03/13/18 23:24	10
<b>Manganese</b>	<b>390</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Nickel</b>	<b>31</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Vanadium</b>	<b>19</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Zinc</b>	<b>45</b>	<b>B</b>	1.1	0.47	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Potassium</b>	<b>2000</b>		27	9.5	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1
<b>Sodium</b>	<b>430</b>		54	8.0	mg/Kg	☼	03/08/18 17:14	03/13/18 02:15	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:51	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>790</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 19:59	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:51	1
<b>Magnesium</b>	<b>37</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:51	1
<b>Manganese</b>	<b>0.87</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
<b>Nickel</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
<b>Potassium</b>	<b>0.75</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:51	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:51	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:51	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:51	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.16</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:29	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:13	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:34	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.018</b>		0.018	0.0060	mg/Kg	☼	03/08/18 14:55	03/09/18 11:49	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	03/15/18 10:15	03/15/18 15:38	1
<b>pH</b>	<b>7.7</b>		0.20	0.20	SU			03/13/18 13:54	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.2**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.020</b>		0.017	0.0076	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
<b>2-Butanone (MEK)</b>	<b>0.0022</b>	<b>J</b>	0.0044	0.0019	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/12/18 16:53	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/12/18 16:53	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	03/07/18 16:00	03/12/18 16:53	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/12/18 16:53	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
<b>Benzo[a]anthracene</b>	<b>0.0051</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
<b>Benzo[b]fluoranthene</b>	<b>0.0099</b>	<b>J</b>	0.037	0.0081	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
<b>Benzo[g,h,i]perylene</b>	<b>0.017</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
<b>Fluoranthene</b>	<b>0.0075</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
<b>Pyrene</b>	<b>0.0074</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	100		44 - 121	03/08/18 07:14	03/09/18 17:38	1
2-Fluorophenol	111		46 - 133	03/08/18 07:14	03/09/18 17:38	1
Nitrobenzene-d5	93		41 - 120	03/08/18 07:14	03/09/18 17:38	1
Phenol-d5	101		46 - 125	03/08/18 07:14	03/09/18 17:38	1
Terphenyl-d14	96		35 - 160	03/08/18 07:14	03/09/18 17:38	1
2,4,6-Tribromophenol	80		25 - 139	03/08/18 07:14	03/09/18 17:38	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Arsenic</b>	<b>7.2</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Barium</b>	<b>42</b>		0.55	0.062	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Beryllium</b>	<b>0.77</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Cadmium</b>	<b>0.032</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Chromium</b>	<b>20</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Cobalt</b>	<b>12</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Copper</b>	<b>21</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Iron</b>	<b>22000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Lead</b>	<b>14</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Magnesium</b>	<b>13000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Calcium</b>	<b>19000</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Manganese</b>	<b>380</b>		0.55	0.079	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Nickel</b>	<b>29</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Selenium</b>	<b>0.50</b>	<b>J</b>	0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Vanadium</b>	<b>30</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Zinc</b>	<b>55</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Potassium</b>	<b>1800</b>		27	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1
<b>Sodium</b>	<b>2100</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 02:19	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Barium</b>	<b>0.29</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:55	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:55	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>320</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:55	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Cobalt</b>	<b>0.025</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Manganese</b>	<b>4.9</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Nickel</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
<b>Potassium</b>	<b>1.0</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:55	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:55	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:55	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:55	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>3.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:34	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:14	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:35	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.019	0.0063	mg/Kg	☼	03/08/18 14:55	03/09/18 11:51	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.16	mg/Kg	☼	03/15/18 10:15	03/15/18 15:39	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 13:57	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.4**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.023</b>		0.016	0.0071	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
<b>2-Butanone (MEK)</b>	<b>0.0045</b>		0.0041	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
<b>Carbon tetrachloride</b>	<b>0.0015 J</b>		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/07/18 16:00	03/12/18 17:18	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/12/18 17:18	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/12/18 17:18	1
Toluene-d8 (Surr)	97		75 - 124	03/07/18 16:00	03/12/18 17:18	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
<b>Benzo[g,h,i]perylene</b>	<b>0.017</b>	<b>J</b>	0.040	0.013	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		44 - 121	03/08/18 07:14	03/09/18 17:13	1
2-Fluorophenol	100		46 - 133	03/08/18 07:14	03/09/18 17:13	1
Nitrobenzene-d5	87		41 - 120	03/08/18 07:14	03/09/18 17:13	1
Phenol-d5	90		46 - 125	03/08/18 07:14	03/09/18 17:13	1
Terphenyl-d14	84		35 - 160	03/08/18 07:14	03/09/18 17:13	1
2,4,6-Tribromophenol	68		25 - 139	03/08/18 07:14	03/09/18 17:13	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Arsenic</b>	<b>6.5</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Barium</b>	<b>42</b>		0.59	0.067	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Beryllium</b>	<b>0.68</b>		0.24	0.055	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Cadmium</b>	<b>0.044</b>	<b>J B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Chromium</b>	<b>19</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Cobalt</b>	<b>9.4</b>		0.30	0.077	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Copper</b>	<b>18</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Iron</b>	<b>21000</b>		12	6.1	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Lead</b>	<b>12</b>		0.30	0.14	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Magnesium</b>	<b>12000</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Calcium</b>	<b>18000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Manganese</b>	<b>250</b>		0.59	0.086	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Nickel</b>	<b>23</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Selenium</b>	<b>0.83</b>		0.59	0.35	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
Silver	<0.30		0.30	0.076	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Vanadium</b>	<b>34</b>		0.30	0.070	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Zinc</b>	<b>48</b>	<b>B</b>	1.2	0.52	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Potassium</b>	<b>1600</b>		30	10	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1
<b>Sodium</b>	<b>2300</b>		59	8.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:33	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 21:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Cadmium</b>	<b>0.0022</b>	<b>J</b>	0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 21:59	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>380</b>		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 21:59	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Cobalt</b>	<b>0.022</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 21:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Manganese</b>	<b>4.4</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Nickel</b>	<b>0.020</b>	<b>J</b>	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
<b>Potassium</b>	<b>1.1</b>	<b>J</b>	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 21:59	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 21:59	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 21:59	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 21:59	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>2.2</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:39	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:17	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:37	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.025</b>		0.018	0.0061	mg/Kg	☼	03/08/18 14:55	03/09/18 11:53	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	03/15/18 10:15	03/15/18 15:39	1
<b>pH</b>	<b>8.1</b>		0.20	0.20	SU			03/13/18 14:01	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

**Date Collected: 03/06/18 12:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.2**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/12/18 17:44	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/12/18 17:44	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/07/18 16:00	03/12/18 17:44	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/12/18 17:44	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

**Date Collected: 03/06/18 12:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
<b>Benzo[g,h,i]perylene</b>	<b>0.015</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

Date Collected: 03/06/18 12:10

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 86.2

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 07:14	03/09/18 11:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		44 - 121	03/08/18 07:14	03/09/18 11:08	1
2-Fluorophenol	100		46 - 133	03/08/18 07:14	03/09/18 11:08	1
Nitrobenzene-d5	86		41 - 120	03/08/18 07:14	03/09/18 11:08	1
Phenol-d5	93		46 - 125	03/08/18 07:14	03/09/18 11:08	1
Terphenyl-d14	74		35 - 160	03/08/18 07:14	03/09/18 11:08	1
2,4,6-Tribromophenol	70		25 - 139	03/08/18 07:14	03/09/18 11:08	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Arsenic</b>	<b>5.8</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Barium</b>	<b>35</b>		0.55	0.062	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Beryllium</b>	<b>0.65</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Cadmium</b>	<b>0.064</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Chromium</b>	<b>15</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Cobalt</b>	<b>15</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Copper</b>	<b>20</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Iron</b>	<b>17000</b>		11	5.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Lead</b>	<b>11</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Magnesium</b>	<b>31000</b>		5.5	2.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Calcium</b>	<b>92000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:14	03/13/18 23:28	10
<b>Manganese</b>	<b>480</b>		0.55	0.079	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Nickel</b>	<b>33</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Selenium</b>	<b>0.37</b>	<b>J</b>	0.55	0.32	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
Silver	<0.27		0.27	0.071	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Vanadium</b>	<b>19</b>		0.27	0.065	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Zinc</b>	<b>48</b>	<b>B</b>	1.1	0.48	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Potassium</b>	<b>2200</b>		27	9.7	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1
<b>Sodium</b>	<b>1200</b>		55	8.1	mg/Kg	☼	03/08/18 17:14	03/13/18 02:38	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
<b>Barium</b>	<b>0.27</b>	<b>J</b>	0.50	0.050	mg/L		03/12/18 09:21	03/13/18 22:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 22:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 22:04	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

**Date Collected: 03/06/18 12:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>740</b>		50	5.0	mg/L		03/12/18 09:21	03/14/18 20:04	10
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Copper	<0.025	F1	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 22:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 22:04	1
<b>Magnesium</b>	<b>31</b>		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 22:04	1
<b>Manganese</b>	<b>0.63</b>		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
<b>Potassium</b>	<b>1.1</b>	J	2.5	0.50	mg/L		03/12/18 09:21	03/13/18 22:04	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 22:04	1
Silver	<0.025	F1	0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 22:04	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 22:04	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.24</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:53	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 19:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 19:17	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:38	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	J	0.018	0.0058	mg/Kg	☼	03/08/18 14:55	03/09/18 11:55	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	03/15/18 10:15	03/15/18 15:40	1
<b>pH</b>	<b>7.7</b>		0.20	0.20	SU			03/13/18 14:04	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

Date Collected: 03/06/18 12:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 83.2

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.032</b>		0.018	0.0078	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
<b>2-Butanone (MEK)</b>	<b>0.0068</b>		0.0045	0.0020	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	03/07/18 16:00	03/12/18 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/07/18 16:00	03/12/18 18:09	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/12/18 18:09	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/12/18 18:09	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/12/18 18:09	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

**Date Collected: 03/06/18 12:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 83.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

Date Collected: 03/06/18 12:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 83.2

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	82		44 - 121	03/07/18 17:47	03/08/18 15:05	1
2-Fluorophenol	95		46 - 133	03/07/18 17:47	03/08/18 15:05	1
Nitrobenzene-d5	76		41 - 120	03/07/18 17:47	03/08/18 15:05	1
Phenol-d5	87		46 - 125	03/07/18 17:47	03/08/18 15:05	1
Terphenyl-d14	73		35 - 160	03/07/18 17:47	03/08/18 15:05	1
2,4,6-Tribromophenol	65		25 - 139	03/07/18 17:47	03/08/18 15:05	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Arsenic</b>	<b>2.9</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Barium</b>	<b>35</b>		0.58	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Beryllium</b>	<b>0.40</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Cadmium</b>	<b>0.15</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Chromium</b>	<b>9.5</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Cobalt</b>	<b>5.4</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Copper</b>	<b>9.9</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Iron</b>	<b>10000</b>		12	6.1	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Lead</b>	<b>7.6</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Magnesium</b>	<b>14000</b>		5.8	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Calcium</b>	<b>24000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Manganese</b>	<b>310</b>		0.58	0.085	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Nickel</b>	<b>12</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Selenium</b>	<b>0.58</b>		0.58	0.34	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Vanadium</b>	<b>17</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Zinc</b>	<b>24</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Potassium</b>	<b>660</b>		29	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1
<b>Sodium</b>	<b>1400</b>		58	8.6	mg/Kg	☼	03/08/18 17:17	03/09/18 17:33	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Barium</b>	<b>0.36</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 17:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 17:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 17:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

**Date Collected: 03/06/18 12:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 83.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>280</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 17:45	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Cobalt</b>	<b>0.016</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 17:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Magnesium</b>	<b>90</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Manganese</b>	<b>9.4</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Nickel</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
<b>Potassium</b>	<b>0.99</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 17:45	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 17:45	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:45	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 17:45	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:09	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:34	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:53	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.018</b>		0.018	0.0059	mg/Kg	☼	03/08/18 14:55	03/09/18 10:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:33	1
<b>pH</b>	<b>8.4</b>		0.20	0.20	SU			03/13/18 14:10	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

Date Collected: 03/06/18 12:30

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 81.5

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.0084</b>	<b>J</b>	0.016	0.0070	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/12/18 18:34	1
Dibromofluoromethane	95		75 - 126	03/07/18 16:00	03/12/18 18:34	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/12/18 18:34	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/12/18 18:34	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

**Date Collected: 03/06/18 12:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
<b>2-Methylnaphthalene</b>	<b>0.0071</b>	<b>J</b>	0.078	0.0071	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

**Date Collected: 03/06/18 12:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		44 - 121	03/07/18 17:47	03/08/18 15:30	1
2-Fluorophenol	116		46 - 133	03/07/18 17:47	03/08/18 15:30	1
Nitrobenzene-d5	90		41 - 120	03/07/18 17:47	03/08/18 15:30	1
Phenol-d5	118		46 - 125	03/07/18 17:47	03/08/18 15:30	1
Terphenyl-d14	86		35 - 160	03/07/18 17:47	03/08/18 15:30	1
2,4,6-Tribromophenol	89		25 - 139	03/07/18 17:47	03/08/18 15:30	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Arsenic</b>	<b>1.9</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Barium</b>	<b>27</b>		0.59	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Beryllium</b>	<b>0.46</b>		0.24	0.055	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Cadmium</b>	<b>0.095</b>	<b>J B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Chromium</b>	<b>12</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Cobalt</b>	<b>5.1</b>		0.29	0.077	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Copper</b>	<b>12</b>		0.59	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Iron</b>	<b>12000</b>		12	6.1	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Lead</b>	<b>6.9</b>		0.29	0.14	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Magnesium</b>	<b>34000</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Calcium</b>	<b>81000</b>	<b>B</b>	120	20	mg/Kg	☼	03/08/18 17:17	03/12/18 23:45	10
<b>Manganese</b>	<b>200</b>		0.59	0.085	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Nickel</b>	<b>16</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Vanadium</b>	<b>16</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Zinc</b>	<b>31</b>		1.2	0.52	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Potassium</b>	<b>1500</b>		29	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1
<b>Sodium</b>	<b>410</b>		59	8.7	mg/Kg	☼	03/08/18 17:17	03/09/18 17:48	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:01	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

Date Collected: 03/06/18 12:30

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 81.5

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>360</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:01	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Magnesium</b>	<b>160</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Manganese</b>	<b>2.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Nickel</b>	<b>0.010</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
<b>Potassium</b>	<b>0.88</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:01	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:01	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:01	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:01	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.64</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:14	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:35	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:55	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015</b>	<b>J</b>	0.018	0.0061	mg/Kg	☼	03/08/18 14:55	03/09/18 10:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.19	mg/Kg	☼	03/08/18 15:20	03/09/18 15:33	1
<b>pH</b>	<b>8.0</b>		0.20	0.20	SU			03/13/18 14:14	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.4**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
<b>Carbon tetrachloride</b>	<b>0.0011</b>	<b>J</b>	0.0014	0.00042	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00041	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,1-Dichloroethane	<0.0014		0.0014	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00043	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Toluene	<0.0014		0.0014	0.00037	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	03/07/18 16:00	03/12/18 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/07/18 16:00	03/12/18 18:59	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/12/18 18:59	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/12/18 18:59	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/12/18 18:59	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
<b>Benzo[g,h,i]perylene</b>	<b>0.025</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
<b>Chrysene</b>	<b>0.019</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
<b>2-Methylnaphthalene</b>	<b>0.038</b>	<b>J</b>	0.076	0.0069	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
<b>Naphthalene</b>	<b>0.0085</b>	<b>J</b>	0.037	0.0058	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

Date Collected: 03/06/18 13:10

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 86.4

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
<b>Phenanthrene</b>	<b>0.044</b>		0.037	0.0052	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		44 - 121				03/07/18 17:47	03/08/18 15:54	1
2-Fluorophenol	101		46 - 133				03/07/18 17:47	03/08/18 15:54	1
Nitrobenzene-d5	83		41 - 120				03/07/18 17:47	03/08/18 15:54	1
Phenol-d5	103		46 - 125				03/07/18 17:47	03/08/18 15:54	1
Terphenyl-d14	81		35 - 160				03/07/18 17:47	03/08/18 15:54	1
2,4,6-Tribromophenol	74		25 - 139				03/07/18 17:47	03/08/18 15:54	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Arsenic</b>	<b>6.7</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Barium</b>	<b>26</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Beryllium</b>	<b>0.59</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Cadmium</b>	<b>0.10</b>	<b>J B</b>	0.11	0.019	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Chromium</b>	<b>13</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Cobalt</b>	<b>10</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Copper</b>	<b>19</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Iron</b>	<b>18000</b>		11	5.6	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Magnesium</b>	<b>35000</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:17	03/12/18 23:49	10
<b>Manganese</b>	<b>360</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Selenium</b>	<b>0.44</b>	<b>J</b>	0.54	0.31	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Vanadium</b>	<b>16</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Zinc</b>	<b>42</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Potassium</b>	<b>2300</b>		27	9.5	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1
<b>Sodium</b>	<b>170</b>		54	7.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:53	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
<b>Barium</b>	<b>0.41</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:06	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	680		50	5.0	mg/L		03/13/18 06:45	03/14/18 11:55	10
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Cobalt	0.015	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Copper	0.011	J	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:06	1
Magnesium	45		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:06	1
Manganese	2.0		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Nickel	0.043		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Potassium	4.5		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:06	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:06	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:06	1
Zinc	0.043	J	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:06	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.049		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:18	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:35	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:56	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.019	0.0063	mg/Kg	☼	03/08/18 14:55	03/09/18 10:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	03/08/18 15:20	03/09/18 15:34	1
pH	7.9		0.20	0.20	SU			03/13/18 14:17	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## GC/MS VOA

### Prep Batch: 422667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	5035	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	5035	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	5035	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	5035	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	5035	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	5035	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	5035	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	5035	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	5035	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	5035	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	5035	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	5035	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	5035	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	5035	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	5035	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	5035	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	5035	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	5035	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	5035	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	5035	
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	5035	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	5035	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	5035	

### Analysis Batch: 422818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	8260B	422667
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	8260B	422667
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	8260B	422667
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	8260B	422667
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	8260B	422667
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	8260B	422667
MB 500-422818/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-422818/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 422971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	8260B	422667
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	8260B	422667
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	8260B	422667
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	8260B	422667
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	8260B	422667
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	8260B	422667
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	8260B	422667
MB 500-422971/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-422971/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 423040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	8260B	422667
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	8260B	422667

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## GC/MS VOA (Continued)

### Analysis Batch: 423040 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	8260B	422667
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	8260B	422667
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	8260B	422667
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	8260B	422667
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	8260B	422667
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	8260B	422667
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	8260B	422667
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	8260B	422667
MB 500-423040/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-423040/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-423040/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 422599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	3541	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	3541	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	3541	
MB 500-422599/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-422599/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Prep Batch: 422635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	3541	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	3541	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	3541	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	3541	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	3541	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	3541	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	3541	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	3541	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	3541	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	3541	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	3541	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	3541	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	3541	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	3541	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	3541	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	3541	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	3541	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	3541	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	3541	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	3541	
MB 500-422635/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-422635/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	3541	
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	3541	



# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 422661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-422599/1-A	Method Blank	Total/NA	Solid	8270D	422599
LCS 500-422599/2-A	Lab Control Sample	Total/NA	Solid	8270D	422599

### Analysis Batch: 422679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	8270D	422599
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	8270D	422599
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	8270D	422599

### Analysis Batch: 422826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	8270D	422635
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	8270D	422635
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	8270D	422635
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	8270D	422635
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	8270D	422635
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	8270D	422635
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	8270D	422635
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	8270D	422635
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	8270D	422635
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	8270D	422635
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	8270D	422635
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	8270D	422635
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	8270D	422635
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	8270D	422635
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	8270D	422635
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	8270D	422635
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	8270D	422635
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	8270D	422635
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	8270D	422635
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	8270D	422635
MB 500-422635/1-A	Method Blank	Total/NA	Solid	8270D	422635
LCS 500-422635/2-A	Lab Control Sample	Total/NA	Solid	8270D	422635
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	8270D	422635
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	8270D	422635

## Metals

### Prep Batch: 422730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	7471B	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	7471B	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	
MB 500-422730/11-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-422730/12-A	Lab Control Sample	Total/NA	Solid	7471B	
500-141817-23 MS	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	
500-141817-23 MSD	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	
500-141817-23 DU	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Prep Batch: 422742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	7471B	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	7471B	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	7471B	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	7471B	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	7471B	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	7471B	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	7471B	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	7471B	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	7471B	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	7471B	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	7471B	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	7471B	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	7471B	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	7471B	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	7471B	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	7471B	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	7471B	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	7471B	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	7471B	
MB 500-422742/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-422742/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	

### Prep Batch: 422763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	3050B	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	3050B	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	3050B	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	3050B	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	3050B	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	3050B	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	3050B	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	3050B	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	3050B	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	3050B	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	3050B	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	3050B	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	3050B	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	3050B	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	3050B	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	3050B	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	3050B	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	3050B	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	3050B	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	3050B	
MB 500-422763/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-422763/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	3050B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Prep Batch: 422763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	3050B	
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	3050B	

### Prep Batch: 422764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	3050B	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	3050B	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	3050B	
MB 500-422764/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-422764/2-A	Lab Control Sample	Total/NA	Solid	3050B	

### Analysis Batch: 422882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	422742
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	7471B	422742
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	7471B	422742
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	7471B	422742
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	7471B	422742
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	7471B	422742
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	7471B	422742
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	7471B	422742
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	7471B	422742
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	7471B	422742
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	7471B	422742
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	7471B	422742
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	7471B	422742
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	7471B	422742
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	7471B	422742
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	7471B	422742
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	7471B	422742
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	7471B	422742
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	7471B	422742
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	7471B	422742
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	7471B	422730
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	7471B	422730
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	422730
MB 500-422730/11-A	Method Blank	Total/NA	Solid	7471B	422730
MB 500-422742/12-A	Method Blank	Total/NA	Solid	7471B	422742
LCS 500-422730/12-A	Lab Control Sample	Total/NA	Solid	7471B	422730
LCS 500-422742/13-A	Lab Control Sample	Total/NA	Solid	7471B	422742
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	422742
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	422742
500-141817-23 MS	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	422730
500-141817-23 MSD	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	422730
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	7471B	422742
500-141817-23 DU	2490V2-3-B11 (10-15)	Total/NA	Solid	7471B	422730

### Leach Batch: 422885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	1311	
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	1311	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Leach Batch: 422885 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	1311	
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	1311	
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	1311	
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	1311	
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	1311	
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	1311	
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	1311	
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	1311	
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	1311	
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	1311	
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	1311	
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	1311	
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	1311	
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	1311	
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	1311	
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	1311	
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	1311	
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	1311	
LB 500-422885/1-B	Method Blank	TCLP	Solid	1311	
LB 500-422885/1-C	Method Blank	TCLP	Solid	1311	
500-141817-1 MS	2490V2-3-B01 (0-5)	TCLP	Solid	1311	
500-141817-20 MS	2490V2-3-B17 (5-8)	TCLP	Solid	1311	
500-141817-1 DU	2490V2-3-B01 (0-5)	TCLP	Solid	1311	
500-141817-20 DU	2490V2-3-B17 (5-8)	TCLP	Solid	1311	

### Leach Batch: 422889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	1311	
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	1311	
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	1311	
LB 500-422889/1-B	Method Blank	TCLP	Solid	1311	
LB 500-422889/1-D	Method Blank	TCLP	Solid	1311	

### Leach Batch: 422893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	SPLP East	Solid	1312	
500-141817-2	2490V2-3-B02 (0-5)	SPLP East	Solid	1312	
500-141817-3	2490V2-3-B06 (0-5)	SPLP East	Solid	1312	
500-141817-4	2490V2-3-B06 (0-5) Dup	SPLP East	Solid	1312	
500-141817-5	2490V2-3-B06 (5-10)	SPLP East	Solid	1312	
500-141817-6	2490V2-3-B06 (10-15)	SPLP East	Solid	1312	
500-141817-7	2490V2-3-B07 (0-5)	SPLP East	Solid	1312	
500-141817-8	2490V2-3-B07 (5-10)	SPLP East	Solid	1312	
500-141817-9	2490V2-3-B07 (10-15)	SPLP East	Solid	1312	
500-141817-10	2490V2-3-B08 (0-5)	SPLP East	Solid	1312	
500-141817-11	2490V2-3-B09 (0-5)	SPLP East	Solid	1312	
500-141817-12	2490V2-3-B10 (0-5)	SPLP East	Solid	1312	
500-141817-13	2490V2-3-B11 (0-5)	SPLP East	Solid	1312	
500-141817-14	2490V2-3-B11 (5-10)	SPLP East	Solid	1312	
500-141817-15	2490V2-3-B11 (5-10) Dup	SPLP East	Solid	1312	
500-141817-16	2490V2-3-B16 (0-5)	SPLP East	Solid	1312	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Leach Batch: 422893 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-17	2490V2-3-B16 (5-8)	SPLP East	Solid	1312	
500-141817-18	2490V2-3-B17 (0-5)	SPLP East	Solid	1312	
500-141817-19	2490V2-3-B17 (0-5) Dup	SPLP East	Solid	1312	
500-141817-20	2490V2-3-B17 (5-8)	SPLP East	Solid	1312	
LB 500-422893/1-B	Method Blank	SPLP East	Solid	1312	
500-141817-6 MS	2490V2-3-B06 (10-15)	SPLP East	Solid	1312	
500-141817-6 DU	2490V2-3-B06 (10-15)	SPLP East	Solid	1312	

### Leach Batch: 422895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	SPLP East	Solid	1312	
500-141817-22	2490V2-3-B18 (5-8)	SPLP East	Solid	1312	
500-141817-23	2490V2-3-B11 (10-15)	SPLP East	Solid	1312	
LB 500-422895/1-B	Method Blank	SPLP East	Solid	1312	

### Analysis Batch: 423068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	6010B	422764
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	6010B	422764
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	6010B	422764
MB 500-422764/1-A	Method Blank	Total/NA	Solid	6010B	422764
LCS 500-422764/2-A	Lab Control Sample	Total/NA	Solid	6010B	422764

### Prep Batch: 423096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	3010A	422885
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	3010A	422885
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	3010A	422885
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	3010A	422885
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	3010A	422885
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	3010A	422885
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	3010A	422885
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	3010A	422885
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	3010A	422885
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	3010A	422885
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	3010A	422885
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	3010A	422885
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	3010A	422885
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	3010A	422885
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	3010A	422885
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	3010A	422885
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	3010A	422885
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	3010A	422885
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	3010A	422885
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	3010A	422885
LB 500-422885/1-B	Method Blank	TCLP	Solid	3010A	422885
LCS 500-423096/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-141817-20 MS	2490V2-3-B17 (5-8)	TCLP	Solid	3010A	422885
500-141817-20 DU	2490V2-3-B17 (5-8)	TCLP	Solid	3010A	422885

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Prep Batch: 423146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	422885
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	7470A	422885
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	7470A	422885
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	7470A	422885
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	7470A	422885
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	7470A	422885
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	7470A	422885
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	7470A	422885
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	7470A	422885
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	7470A	422885
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	7470A	422885
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	7470A	422885
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	7470A	422885
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	7470A	422885
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	7470A	422885
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	7470A	422885
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	7470A	422885
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	7470A	422885
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	7470A	422885
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	7470A	422885
LB 500-422885/1-C	Method Blank	TCLP	Solid	7470A	422885
MB 500-423146/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-423146/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-141817-1 MS	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	422885
500-141817-1 DU	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	422885

### Prep Batch: 423170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	3010A	422889
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	3010A	422889
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	3010A	422889
LB 500-422889/1-B	Method Blank	TCLP	Solid	3010A	422889
LCS 500-423170/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 423171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	SPLP East	Solid	3010A	422893
500-141817-2	2490V2-3-B02 (0-5)	SPLP East	Solid	3010A	422893
500-141817-3	2490V2-3-B06 (0-5)	SPLP East	Solid	3010A	422893
500-141817-4	2490V2-3-B06 (0-5) Dup	SPLP East	Solid	3010A	422893
500-141817-5	2490V2-3-B06 (5-10)	SPLP East	Solid	3010A	422893
500-141817-6	2490V2-3-B06 (10-15)	SPLP East	Solid	3010A	422893
500-141817-7	2490V2-3-B07 (0-5)	SPLP East	Solid	3010A	422893
500-141817-8	2490V2-3-B07 (5-10)	SPLP East	Solid	3010A	422893
500-141817-9	2490V2-3-B07 (10-15)	SPLP East	Solid	3010A	422893
500-141817-10	2490V2-3-B08 (0-5)	SPLP East	Solid	3010A	422893
500-141817-11	2490V2-3-B09 (0-5)	SPLP East	Solid	3010A	422893
500-141817-12	2490V2-3-B10 (0-5)	SPLP East	Solid	3010A	422893
500-141817-13	2490V2-3-B11 (0-5)	SPLP East	Solid	3010A	422893
500-141817-14	2490V2-3-B11 (5-10)	SPLP East	Solid	3010A	422893
500-141817-15	2490V2-3-B11 (5-10) Dup	SPLP East	Solid	3010A	422893

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Prep Batch: 423171 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-16	2490V2-3-B16 (0-5)	SPLP East	Solid	3010A	422893
500-141817-17	2490V2-3-B16 (5-8)	SPLP East	Solid	3010A	422893
500-141817-18	2490V2-3-B17 (0-5)	SPLP East	Solid	3010A	422893
500-141817-19	2490V2-3-B17 (0-5) Dup	SPLP East	Solid	3010A	422893
500-141817-20	2490V2-3-B17 (5-8)	SPLP East	Solid	3010A	422893
LB 500-422893/1-B	Method Blank	SPLP East	Solid	3010A	422893
LCS 500-423171/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-141817-6 MS	2490V2-3-B06 (10-15)	SPLP East	Solid	3010A	422893
500-141817-6 DU	2490V2-3-B06 (10-15)	SPLP East	Solid	3010A	422893

### Prep Batch: 423172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	SPLP East	Solid	3010A	422895
500-141817-22	2490V2-3-B18 (5-8)	SPLP East	Solid	3010A	422895
500-141817-23	2490V2-3-B11 (10-15)	SPLP East	Solid	3010A	422895
LB 500-422895/1-B	Method Blank	SPLP East	Solid	3010A	422895
LCS 500-423172/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Analysis Batch: 423234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	6010B	422764
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	6010B	422764

### Analysis Batch: 423236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	6010B	422763
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	6010B	422763
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	6010B	422763
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	6010B	422763
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	6010B	422763
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	6010B	422763
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	6010B	422763
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	6010B	422763
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	6010B	422763
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	6010B	422763
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	6010B	422763
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	6010B	422763
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	6010B	422763
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	6010B	422763
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	6010B	422763
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	6010B	422763
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	6010B	422763
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	6010B	422763
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	6010B	422763
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	6010B	422763
MB 500-422763/1-A	Method Blank	Total/NA	Solid	6010B	422763
LCS 500-422763/2-A	Lab Control Sample	Total/NA	Solid	6010B	422763
500-141817-1 MS	2490V2-3-B01 (0-5)	Total/NA	Solid	6010B	422763
500-141817-1 MSD	2490V2-3-B01 (0-5)	Total/NA	Solid	6010B	422763
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	6010B	422763

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Analysis Batch: 423264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	6020A	423096
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	6020A	423096
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	6020A	423096
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	6020A	423096
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	6020A	423096
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	6020A	423096
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	6020A	423096
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	6020A	423096
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	6020A	423096
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	6020A	423096
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	6020A	423096
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	6020A	423096
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	6020A	423096
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	6020A	423096
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	6020A	423096
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	6020A	423096
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	6020A	423096
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	6020A	423096
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	6020A	423096
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	6020A	423096
LB 500-422885/1-B	Method Blank	TCLP	Solid	6020A	423096
LCS 500-423096/2-A	Lab Control Sample	Total/NA	Solid	6020A	423096
500-141817-20 MS	2490V2-3-B17 (5-8)	TCLP	Solid	6020A	423096
500-141817-20 DU	2490V2-3-B17 (5-8)	TCLP	Solid	6020A	423096

### Analysis Batch: 423309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	423146
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	7470A	423146
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	7470A	423146
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	7470A	423146
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	7470A	423146
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	7470A	423146
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	7470A	423146
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	7470A	423146
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	7470A	423146
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	7470A	423146
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	7470A	423146
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	7470A	423146
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	7470A	423146
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	7470A	423146
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	7470A	423146
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	7470A	423146
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	7470A	423146
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	7470A	423146
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	7470A	423146
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	7470A	423146
LB 500-422885/1-C	Method Blank	TCLP	Solid	7470A	423146
MB 500-423146/12-A	Method Blank	Total/NA	Solid	7470A	423146
LCS 500-423146/13-A	Lab Control Sample	Total/NA	Solid	7470A	423146
500-141817-1 MS	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	423146

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Analysis Batch: 423309 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1 DU	2490V2-3-B01 (0-5)	TCLP	Solid	7470A	423146

### Prep Batch: 423314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	7470A	422889
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	7470A	422889
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	7470A	422889
LB 500-422889/1-D	Method Blank	TCLP	Solid	7470A	422889
MB 500-423314/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-423314/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Analysis Batch: 423413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	TCLP	Solid	6010B	423096
500-141817-2	2490V2-3-B02 (0-5)	TCLP	Solid	6010B	423096
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	6010B	422763
500-141817-3	2490V2-3-B06 (0-5)	TCLP	Solid	6010B	423096
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	6010B	422763
500-141817-4	2490V2-3-B06 (0-5) Dup	TCLP	Solid	6010B	423096
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	6010B	422763
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	6010B	423096
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	6010B	422763
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	6010B	423096
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	6010B	422763
500-141817-7	2490V2-3-B07 (0-5)	TCLP	Solid	6010B	423096
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	6010B	422763
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	6010B	423096
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	6010B	422763
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	6010B	423096
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	6010B	422763
500-141817-10	2490V2-3-B08 (0-5)	TCLP	Solid	6010B	423096
500-141817-11	2490V2-3-B09 (0-5)	TCLP	Solid	6010B	423096
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	6010B	422763
500-141817-12	2490V2-3-B10 (0-5)	TCLP	Solid	6010B	423096
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	6010B	422763
500-141817-13	2490V2-3-B11 (0-5)	TCLP	Solid	6010B	423096
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	6010B	423096
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	6010B	422763
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	6010B	423096
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	6010B	422763
500-141817-16	2490V2-3-B16 (0-5)	TCLP	Solid	6010B	423096
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	6010B	423096
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	6010B	422763
500-141817-18	2490V2-3-B17 (0-5)	TCLP	Solid	6010B	423096
500-141817-19	2490V2-3-B17 (0-5) Dup	TCLP	Solid	6010B	423096
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	6010B	422763
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	6010B	423170
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	6010B	423170
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	6010B	423170
LB 500-422885/1-B	Method Blank	TCLP	Solid	6010B	423096

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Analysis Batch: 423413 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-422889/1-B	Method Blank	TCLP	Solid	6010B	423170
LCS 500-423096/2-A	Lab Control Sample	Total/NA	Solid	6010B	423096
LCS 500-423170/2-A	Lab Control Sample	Total/NA	Solid	6010B	423170
500-141817-20 MS	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096
500-141817-20 DU	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096

### Analysis Batch: 423428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	SPLP East	Solid	6010B	423171
500-141817-2	2490V2-3-B02 (0-5)	SPLP East	Solid	6010B	423171
500-141817-3	2490V2-3-B06 (0-5)	SPLP East	Solid	6010B	423171
500-141817-4	2490V2-3-B06 (0-5) Dup	SPLP East	Solid	6010B	423171
500-141817-5	2490V2-3-B06 (5-10)	SPLP East	Solid	6010B	423171
500-141817-6	2490V2-3-B06 (10-15)	SPLP East	Solid	6010B	423171
500-141817-7	2490V2-3-B07 (0-5)	SPLP East	Solid	6010B	423171
500-141817-8	2490V2-3-B07 (5-10)	SPLP East	Solid	6010B	423171
500-141817-9	2490V2-3-B07 (10-15)	SPLP East	Solid	6010B	423171
500-141817-10	2490V2-3-B08 (0-5)	SPLP East	Solid	6010B	423171
500-141817-11	2490V2-3-B09 (0-5)	SPLP East	Solid	6010B	423171
500-141817-12	2490V2-3-B10 (0-5)	SPLP East	Solid	6010B	423171
500-141817-13	2490V2-3-B11 (0-5)	SPLP East	Solid	6010B	423171
500-141817-14	2490V2-3-B11 (5-10)	SPLP East	Solid	6010B	423171
500-141817-15	2490V2-3-B11 (5-10) Dup	SPLP East	Solid	6010B	423171
500-141817-16	2490V2-3-B16 (0-5)	SPLP East	Solid	6010B	423171
500-141817-17	2490V2-3-B16 (5-8)	SPLP East	Solid	6010B	423171
500-141817-18	2490V2-3-B17 (0-5)	SPLP East	Solid	6010B	423171
500-141817-19	2490V2-3-B17 (0-5) Dup	SPLP East	Solid	6010B	423171
500-141817-20	2490V2-3-B17 (5-8)	SPLP East	Solid	6010B	423171
500-141817-21	2490V2-3-B18 (0-5)	SPLP East	Solid	6010B	423172
500-141817-22	2490V2-3-B18 (5-8)	SPLP East	Solid	6010B	423172
500-141817-23	2490V2-3-B11 (10-15)	SPLP East	Solid	6010B	423172
LB 500-422893/1-B	Method Blank	SPLP East	Solid	6010B	423171
LB 500-422895/1-B	Method Blank	SPLP East	Solid	6010B	423172
LCS 500-423171/2-A	Lab Control Sample	Total/NA	Solid	6010B	423171
LCS 500-423172/2-A	Lab Control Sample	Total/NA	Solid	6010B	423172
500-141817-6 MS	2490V2-3-B06 (10-15)	SPLP East	Solid	6010B	423171
500-141817-6 DU	2490V2-3-B06 (10-15)	SPLP East	Solid	6010B	423171

### Analysis Batch: 423438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	6020A	423170
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	6020A	423170
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	6020A	423170
LB 500-422889/1-B	Method Blank	TCLP	Solid	6020A	423170
LCS 500-423170/2-A	Lab Control Sample	Total/NA	Solid	6020A	423170

### Analysis Batch: 423474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	TCLP	Solid	7470A	423314
500-141817-22	2490V2-3-B18 (5-8)	TCLP	Solid	7470A	423314
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	7470A	423314

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Metals (Continued)

### Analysis Batch: 423474 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-422889/1-D	Method Blank	TCLP	Solid	7470A	423314
MB 500-423314/12-A	Method Blank	Total/NA	Solid	7470A	423314
LCS 500-423314/13-A	Lab Control Sample	Total/NA	Solid	7470A	423314

### Analysis Batch: 423520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-23	2490V2-3-B11 (10-15)	TCLP	Solid	6010B	423170

### Analysis Batch: 423594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-5	2490V2-3-B06 (5-10)	TCLP	Solid	6010B	423096
500-141817-6	2490V2-3-B06 (10-15)	TCLP	Solid	6010B	423096
500-141817-8	2490V2-3-B07 (5-10)	TCLP	Solid	6010B	423096
500-141817-9	2490V2-3-B07 (10-15)	TCLP	Solid	6010B	423096
500-141817-14	2490V2-3-B11 (5-10)	TCLP	Solid	6010B	423096
500-141817-15	2490V2-3-B11 (5-10) Dup	TCLP	Solid	6010B	423096
500-141817-17	2490V2-3-B16 (5-8)	TCLP	Solid	6010B	423096
500-141817-20	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096
500-141817-20 MS	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096
500-141817-20 DU	2490V2-3-B17 (5-8)	TCLP	Solid	6010B	423096

## General Chemistry

### Analysis Batch: 422653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	Moisture	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	Moisture	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	Moisture	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	Moisture	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	Moisture	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	Moisture	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	Moisture	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	Moisture	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	Moisture	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	Moisture	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	Moisture	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	Moisture	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	Moisture	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	Moisture	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	Moisture	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	Moisture	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	Moisture	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	Moisture	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	Moisture	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	Moisture	
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	Moisture	

### Analysis Batch: 422659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## General Chemistry (Continued)

### Analysis Batch: 422659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	Moisture	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	Moisture	
500-141817-21 DU	2490V2-3-B18 (0-5)	Total/NA	Solid	Moisture	

### Prep Batch: 422712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	9010B	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	9010B	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	9010B	
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	9010B	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	9010B	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	9010B	
MB 500-422712/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-422712/2-A	Lab Control Sample	Total/NA	Solid	9010B	

### Analysis Batch: 422929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	9014	422712
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	9014	422712
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	9014	422712
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	9014	422712
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	9014	422712
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	9014	422712
MB 500-422712/1-A	Method Blank	Total/NA	Solid	9014	422712
LCS 500-422712/2-A	Lab Control Sample	Total/NA	Solid	9014	422712

### Prep Batch: 423266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9010B	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	9010B	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	9010B	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	9010B	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	9010B	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	9010B	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	9010B	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	9010B	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	9010B	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	9010B	
MB 500-423266/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-423266/2-A	Lab Control Sample	Total/NA	Solid	9010B	
500-141817-4 MS	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9010B	
500-141817-4 MSD	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9010B	

### Analysis Batch: 423337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9014	423266
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	9014	423266
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	9014	423266
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	9014	423266
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	9014	423266
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	9014	423266

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## General Chemistry (Continued)

### Analysis Batch: 423337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	9014	423266
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	9014	423266
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	9014	423266
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	9014	423266
MB 500-423266/1-A	Method Blank	Total/NA	Solid	9014	423266
LCS 500-423266/2-A	Lab Control Sample	Total/NA	Solid	9014	423266
500-141817-4 MS	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9014	423266
500-141817-4 MSD	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9014	423266

### Analysis Batch: 423441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-1	2490V2-3-B01 (0-5)	Total/NA	Solid	9045D	
500-141817-2	2490V2-3-B02 (0-5)	Total/NA	Solid	9045D	
500-141817-3	2490V2-3-B06 (0-5)	Total/NA	Solid	9045D	
500-141817-4	2490V2-3-B06 (0-5) Dup	Total/NA	Solid	9045D	
500-141817-5	2490V2-3-B06 (5-10)	Total/NA	Solid	9045D	
500-141817-6	2490V2-3-B06 (10-15)	Total/NA	Solid	9045D	
500-141817-7	2490V2-3-B07 (0-5)	Total/NA	Solid	9045D	
500-141817-8	2490V2-3-B07 (5-10)	Total/NA	Solid	9045D	
500-141817-9	2490V2-3-B07 (10-15)	Total/NA	Solid	9045D	
500-141817-10	2490V2-3-B08 (0-5)	Total/NA	Solid	9045D	
500-141817-11	2490V2-3-B09 (0-5)	Total/NA	Solid	9045D	
500-141817-12	2490V2-3-B10 (0-5)	Total/NA	Solid	9045D	
500-141817-13	2490V2-3-B11 (0-5)	Total/NA	Solid	9045D	
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	9045D	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	9045D	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	9045D	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	9045D	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	9045D	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	9045D	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	9045D	
500-141817-21	2490V2-3-B18 (0-5)	Total/NA	Solid	9045D	
500-141817-22	2490V2-3-B18 (5-8)	Total/NA	Solid	9045D	
500-141817-23	2490V2-3-B11 (10-15)	Total/NA	Solid	9045D	
500-141817-1 DU	2490V2-3-B01 (0-5)	Total/NA	Solid	9045D	
500-141817-20 DU	2490V2-3-B17 (5-8)	Total/NA	Solid	9045D	

### Prep Batch: 423612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	9010B	
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	9010B	
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	9010B	
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	9010B	
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	9010B	
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	9010B	
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	9010B	
MB 500-423612/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-423612/2-A	Lab Control Sample	Total/NA	Solid	9010B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## General Chemistry (Continued)

### Analysis Batch: 423709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141817-14	2490V2-3-B11 (5-10)	Total/NA	Solid	9014	423612
500-141817-15	2490V2-3-B11 (5-10) Dup	Total/NA	Solid	9014	423612
500-141817-16	2490V2-3-B16 (0-5)	Total/NA	Solid	9014	423612
500-141817-17	2490V2-3-B16 (5-8)	Total/NA	Solid	9014	423612
500-141817-18	2490V2-3-B17 (0-5)	Total/NA	Solid	9014	423612
500-141817-19	2490V2-3-B17 (0-5) Dup	Total/NA	Solid	9014	423612
500-141817-20	2490V2-3-B17 (5-8)	Total/NA	Solid	9014	423612
MB 500-423612/1-A	Method Blank	Total/NA	Solid	9014	423612
LCS 500-423612/2-A	Lab Control Sample	Total/NA	Solid	9014	423612

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-141817-1	2490V2-3-B01 (0-5)	89	95	94	97
500-141817-2	2490V2-3-B02 (0-5)	86	93	92	98
500-141817-3	2490V2-3-B06 (0-5)	90	94	90	98
500-141817-4	2490V2-3-B06 (0-5) Dup	86	93	90	97
500-141817-5	2490V2-3-B06 (5-10)	89	96	90	101
500-141817-6	2490V2-3-B06 (10-15)	91	92	89	100
500-141817-7	2490V2-3-B07 (0-5)	89	91	90	100
500-141817-8	2490V2-3-B07 (5-10)	89	92	91	99
500-141817-9	2490V2-3-B07 (10-15)	91	89	88	100
500-141817-10	2490V2-3-B08 (0-5)	89	91	89	100
500-141817-11	2490V2-3-B09 (0-5)	89	92	92	100
500-141817-12	2490V2-3-B10 (0-5)	89	92	92	99
500-141817-13	2490V2-3-B11 (0-5)	89	92	94	97
500-141817-14	2490V2-3-B11 (5-10)	92	90	90	99
500-141817-15	2490V2-3-B11 (5-10) Dup	91	92	88	100
500-141817-16	2490V2-3-B16 (0-5)	90	91	90	97
500-141817-17	2490V2-3-B16 (5-8)	88	92	91	99
500-141817-18	2490V2-3-B17 (0-5)	88	91	93	97
500-141817-19	2490V2-3-B17 (0-5) Dup	90	91	92	97
500-141817-20	2490V2-3-B17 (5-8)	88	91	88	98
500-141817-21	2490V2-3-B18 (0-5)	87	93	89	98
500-141817-22	2490V2-3-B18 (5-8)	88	95	92	98
500-141817-23	2490V2-3-B11 (10-15)	90	92	89	100
LCS 500-422818/4	Lab Control Sample	91	87	79	100
LCS 500-422971/4	Lab Control Sample	90	89	82	101
LCS 500-423040/4	Lab Control Sample	91	90	82	99
LCSD 500-423040/5	Lab Control Sample Dup	91	91	81	99
MB 500-422818/5	Method Blank	92	86	82	99
MB 500-422971/5	Method Blank	88	90	82	102
MB 500-423040/6	Method Blank	87	89	83	98

#### Surrogate Legend

- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane
- DCA = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (44-121)	2FP (46-133)	NBZ (41-120)	PHL (46-125)	TPHL (35-160)	TBP (25-139)
500-141817-1	2490V2-3-B01 (0-5)	81	88	74	81	67	69
500-141817-1 MS	2490V2-3-B01 (0-5)	85	96	77	97	107	77
500-141817-1 MSD	2490V2-3-B01 (0-5)	81	93	73	91	104	71
500-141817-2	2490V2-3-B02 (0-5)	89	102	82	81	77	58
500-141817-3	2490V2-3-B06 (0-5)	94	99	82	88	105	75
500-141817-4	2490V2-3-B06 (0-5) Dup	91	98	81	84	77	70

TestAmerica Chicago

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (44-121)	2FP (46-133)	NBZ (41-120)	PHL (46-125)	TPHL (35-160)	TBP (25-139)
500-141817-5	2490V2-3-B06 (5-10)	91	101	86	93	70	66
500-141817-6	2490V2-3-B06 (10-15)	87	99	85	88	69	65
500-141817-7	2490V2-3-B07 (0-5)	93	101	84	86	113	78
500-141817-8	2490V2-3-B07 (5-10)	93	105	84	86	91	72
500-141817-9	2490V2-3-B07 (10-15)	96	111	90	101	74	65
500-141817-10	2490V2-3-B08 (0-5)	91	101	86	82	76	68
500-141817-11	2490V2-3-B09 (0-5)	93	103	86	85	83	72
500-141817-12	2490V2-3-B10 (0-5)	113	128	111	111	93	83
500-141817-13	2490V2-3-B11 (0-5)	92	103	84	83	77	72
500-141817-14	2490V2-3-B11 (5-10)	93	107	87	90	75	66
500-141817-15	2490V2-3-B11 (5-10) Dup	92	102	86	96	73	61
500-141817-16	2490V2-3-B16 (0-5)	96	105	91	89	77	71
500-141817-17	2490V2-3-B16 (5-8)	94	104	89	98	75	67
500-141817-18	2490V2-3-B17 (0-5)	100	111	93	101	96	80
500-141817-19	2490V2-3-B17 (0-5) Dup	90	100	87	90	84	68
500-141817-20	2490V2-3-B17 (5-8)	90	100	86	93	74	70
500-141817-21	2490V2-3-B18 (0-5)	82	95	76	87	73	65
500-141817-22	2490V2-3-B18 (5-8)	98	116	90	118	86	89
500-141817-23	2490V2-3-B11 (10-15)	87	101	83	103	81	74
LCS 500-422599/2-A	Lab Control Sample	94	99	95	100	91	87
LCS 500-422635/2-A	Lab Control Sample	95	110	90	105	79	79
MB 500-422599/1-A	Method Blank	87	96	86	95	92	73
MB 500-422635/1-A	Method Blank	92	98	89	98	74	63

### Surrogate Legend

FBP = 2-Fluorobiphenyl  
 2FP = 2-Fluorophenol  
 NBZ = Nitrobenzene-d5  
 PHL = Phenol-d5  
 TPHL = Terphenyl-d14  
 TBP = 2,4,6-Tribromophenol



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-422818/5**

**Matrix: Solid**

**Analysis Batch: 422818**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			03/09/18 10:23	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			03/09/18 10:23	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			03/09/18 10:23	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			03/09/18 10:23	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			03/09/18 10:23	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			03/09/18 10:23	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			03/09/18 10:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			03/09/18 10:23	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			03/09/18 10:23	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			03/09/18 10:23	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			03/09/18 10:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			03/09/18 10:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			03/09/18 10:23	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			03/09/18 10:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			03/09/18 10:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			03/09/18 10:23	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			03/09/18 10:23	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			03/09/18 10:23	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			03/09/18 10:23	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			03/09/18 10:23	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			03/09/18 10:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			03/09/18 10:23	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			03/09/18 10:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			03/09/18 10:23	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/09/18 10:23	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			03/09/18 10:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			03/09/18 10:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			03/09/18 10:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			03/09/18 10:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			03/09/18 10:23	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/09/18 10:23	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			03/09/18 10:23	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			03/09/18 10:23	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			03/09/18 10:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131		03/09/18 10:23	1
Dibromofluoromethane	86		75 - 126		03/09/18 10:23	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134		03/09/18 10:23	1
Toluene-d8 (Surr)	99		75 - 124		03/09/18 10:23	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422818/4**

**Matrix: Solid**

**Analysis Batch: 422818**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0453		mg/Kg		91	40 - 150
Benzene	0.0500	0.0525		mg/Kg		105	70 - 125
Bromodichloromethane	0.0500	0.0485		mg/Kg		97	67 - 129
Bromoform	0.0500	0.0428		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0348		mg/Kg		70	70 - 130
2-Butanone (MEK)	0.0500	0.0484		mg/Kg		97	47 - 138
Carbon disulfide	0.0500	0.0560		mg/Kg		112	70 - 129
Carbon tetrachloride	0.0500	0.0476		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0505		mg/Kg		101	50 - 150
Chloroethane	0.0500	0.0289	*	mg/Kg		58	75 - 125
Chloroform	0.0500	0.0508		mg/Kg		102	57 - 135
Chloromethane	0.0500	0.0473		mg/Kg		95	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0516		mg/Kg		103	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0499		mg/Kg		100	70 - 125
Dibromochloromethane	0.0500	0.0448		mg/Kg		90	69 - 125
1,1-Dichloroethane	0.0500	0.0481		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0465		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.0556		mg/Kg		111	70 - 120
1,2-Dichloropropane	0.0500	0.0507		mg/Kg		101	70 - 125
Ethylbenzene	0.0500	0.0502		mg/Kg		100	61 - 136
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
Methylene Chloride	0.0500	0.0509		mg/Kg		102	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0434		mg/Kg		87	50 - 148
Methyl tert-butyl ether	0.0500	0.0444		mg/Kg		89	50 - 140
Styrene	0.0500	0.0478		mg/Kg		96	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0461		mg/Kg		92	70 - 122
Tetrachloroethene	0.0500	0.0545		mg/Kg		109	70 - 124
Toluene	0.0500	0.0534		mg/Kg		107	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0542		mg/Kg		108	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0491		mg/Kg		98	70 - 125
1,1,1-Trichloroethane	0.0500	0.0518		mg/Kg		104	70 - 128
1,1,2-Trichloroethane	0.0500	0.0496		mg/Kg		99	70 - 125
Trichloroethene	0.0500	0.0517		mg/Kg		103	70 - 125
Vinyl acetate	0.0500	0.0480		mg/Kg		96	40 - 153
Vinyl chloride	0.0500	0.0528		mg/Kg		106	70 - 125
Xylenes, Total	0.100	0.103		mg/Kg		103	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	87		75 - 126
1,2-Dichloroethane-d4 (Surr)	79		70 - 134
Toluene-d8 (Surr)	100		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422971/5**

**Matrix: Solid**

**Analysis Batch: 422971**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			03/10/18 10:29	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			03/10/18 10:29	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			03/10/18 10:29	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			03/10/18 10:29	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			03/10/18 10:29	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			03/10/18 10:29	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			03/10/18 10:29	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			03/10/18 10:29	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			03/10/18 10:29	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			03/10/18 10:29	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			03/10/18 10:29	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			03/10/18 10:29	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			03/10/18 10:29	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			03/10/18 10:29	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			03/10/18 10:29	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			03/10/18 10:29	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			03/10/18 10:29	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			03/10/18 10:29	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			03/10/18 10:29	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			03/10/18 10:29	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			03/10/18 10:29	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			03/10/18 10:29	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			03/10/18 10:29	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			03/10/18 10:29	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			03/10/18 10:29	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			03/10/18 10:29	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			03/10/18 10:29	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/10/18 10:29	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			03/10/18 10:29	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			03/10/18 10:29	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			03/10/18 10:29	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			03/10/18 10:29	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			03/10/18 10:29	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/10/18 10:29	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			03/10/18 10:29	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			03/10/18 10:29	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			03/10/18 10:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131		03/10/18 10:29	1
Dibromofluoromethane	90		75 - 126		03/10/18 10:29	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134		03/10/18 10:29	1
Toluene-d8 (Surr)	102		75 - 124		03/10/18 10:29	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422971/4**

**Matrix: Solid**

**Analysis Batch: 422971**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0483		mg/Kg		97	40 - 150
Benzene	0.0500	0.0509		mg/Kg		102	70 - 125
Bromodichloromethane	0.0500	0.0478		mg/Kg		96	67 - 129
Bromoform	0.0500	0.0448		mg/Kg		90	68 - 136
Bromomethane	0.0500	0.0359		mg/Kg		72	70 - 130
2-Butanone (MEK)	0.0500	0.0508		mg/Kg		102	47 - 138
Carbon disulfide	0.0500	0.0539		mg/Kg		108	70 - 129
Carbon tetrachloride	0.0500	0.0457		mg/Kg		91	75 - 125
Chlorobenzene	0.0500	0.0496		mg/Kg		99	50 - 150
Chloroethane	0.0500	0.0245	*	mg/Kg		49	75 - 125
Chloroform	0.0500	0.0483		mg/Kg		97	57 - 135
Chloromethane	0.0500	0.0464		mg/Kg		93	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0515		mg/Kg		103	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0488		mg/Kg		98	70 - 125
Dibromochloromethane	0.0500	0.0460		mg/Kg		92	69 - 125
1,1-Dichloroethane	0.0500	0.0474		mg/Kg		95	70 - 125
1,2-Dichloroethane	0.0500	0.0459		mg/Kg		92	70 - 130
1,1-Dichloroethene	0.0500	0.0537		mg/Kg		107	70 - 120
1,2-Dichloropropane	0.0500	0.0487		mg/Kg		97	70 - 125
Ethylbenzene	0.0500	0.0504		mg/Kg		101	61 - 136
2-Hexanone	0.0500	0.0452		mg/Kg		90	48 - 146
Methylene Chloride	0.0500	0.0492		mg/Kg		98	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0467		mg/Kg		93	50 - 148
Methyl tert-butyl ether	0.0500	0.0461		mg/Kg		92	50 - 140
Styrene	0.0500	0.0477		mg/Kg		95	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0477		mg/Kg		95	70 - 122
Tetrachloroethene	0.0500	0.0537		mg/Kg		107	70 - 124
Toluene	0.0500	0.0522		mg/Kg		104	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0526		mg/Kg		105	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0483		mg/Kg		97	70 - 125
1,1,1-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 128
1,1,2-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 125
Trichloroethene	0.0500	0.0487		mg/Kg		97	70 - 125
Vinyl acetate	0.0500	0.0516		mg/Kg		103	40 - 153
Vinyl chloride	0.0500	0.0509		mg/Kg		102	70 - 125
Xylenes, Total	0.100	0.101		mg/Kg		101	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		75 - 131
Dibromofluoromethane	89		75 - 126
1,2-Dichloroethane-d4 (Surr)	82		70 - 134
Toluene-d8 (Surr)	101		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-423040/6**

**Matrix: Solid**

**Analysis Batch: 423040**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			03/12/18 10:57	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			03/12/18 10:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			03/12/18 10:57	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			03/12/18 10:57	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			03/12/18 10:57	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			03/12/18 10:57	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			03/12/18 10:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			03/12/18 10:57	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			03/12/18 10:57	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			03/12/18 10:57	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			03/12/18 10:57	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			03/12/18 10:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			03/12/18 10:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			03/12/18 10:57	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			03/12/18 10:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			03/12/18 10:57	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			03/12/18 10:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			03/12/18 10:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			03/12/18 10:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			03/12/18 10:57	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			03/12/18 10:57	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			03/12/18 10:57	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			03/12/18 10:57	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			03/12/18 10:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			03/12/18 10:57	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			03/12/18 10:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			03/12/18 10:57	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/12/18 10:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			03/12/18 10:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			03/12/18 10:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			03/12/18 10:57	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			03/12/18 10:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			03/12/18 10:57	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/12/18 10:57	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			03/12/18 10:57	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			03/12/18 10:57	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			03/12/18 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131		03/12/18 10:57	1
Dibromofluoromethane	89		75 - 126		03/12/18 10:57	1
1,2-Dichloroethane-d4 (Surr)	83		70 - 134		03/12/18 10:57	1
Toluene-d8 (Surr)	98		75 - 124		03/12/18 10:57	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-423040/4**

**Matrix: Solid**

**Analysis Batch: 423040**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0306		mg/Kg		61	40 - 150
Benzene	0.0500	0.0544		mg/Kg		109	70 - 125
Bromodichloromethane	0.0500	0.0513		mg/Kg		103	67 - 129
Bromoform	0.0500	0.0462		mg/Kg		92	68 - 136
Bromomethane	0.0500	0.0460		mg/Kg		92	70 - 130
2-Butanone (MEK)	0.0500	0.0420		mg/Kg		84	47 - 138
Carbon disulfide	0.0500	0.0582		mg/Kg		116	70 - 129
Carbon tetrachloride	0.0500	0.0507		mg/Kg		101	75 - 125
Chlorobenzene	0.0500	0.0505		mg/Kg		101	50 - 150
Chloroethane	0.0500	0.0447		mg/Kg		89	75 - 125
Chloroform	0.0500	0.0533		mg/Kg		107	57 - 135
Chloromethane	0.0500	0.0451		mg/Kg		90	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0544		mg/Kg		109	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0511		mg/Kg		102	70 - 125
Dibromochloromethane	0.0500	0.0473		mg/Kg		95	69 - 125
1,1-Dichloroethane	0.0500	0.0513		mg/Kg		103	70 - 125
1,2-Dichloroethane	0.0500	0.0479		mg/Kg		96	70 - 130
1,1-Dichloroethene	0.0500	0.0581		mg/Kg		116	70 - 120
1,2-Dichloropropane	0.0500	0.0517		mg/Kg		103	70 - 125
Ethylbenzene	0.0500	0.0508		mg/Kg		102	61 - 136
2-Hexanone	0.0500	0.0448		mg/Kg		90	48 - 146
Methylene Chloride	0.0500	0.0513		mg/Kg		103	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0433		mg/Kg		87	50 - 148
Methyl tert-butyl ether	0.0500	0.0477		mg/Kg		95	50 - 140
Styrene	0.0500	0.0483		mg/Kg		97	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0473		mg/Kg		95	70 - 122
Tetrachloroethene	0.0500	0.0554		mg/Kg		111	70 - 124
Toluene	0.0500	0.0535		mg/Kg		107	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0576		mg/Kg		115	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0495		mg/Kg		99	70 - 125
1,1,1-Trichloroethane	0.0500	0.0540		mg/Kg		108	70 - 128
1,1,2-Trichloroethane	0.0500	0.0503		mg/Kg		101	70 - 125
Trichloroethene	0.0500	0.0536		mg/Kg		107	70 - 125
Vinyl acetate	0.0500	0.0560		mg/Kg		112	40 - 153
Vinyl chloride	0.0500	0.0509		mg/Kg		102	70 - 125
Xylenes, Total	0.100	0.102		mg/Kg		102	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	90		75 - 126
1,2-Dichloroethane-d4 (Surr)	82		70 - 134
Toluene-d8 (Surr)	99		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-423040/5

Matrix: Solid

Analysis Batch: 423040

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0279		mg/Kg		56	40 - 150	9	30
Benzene	0.0500	0.0536		mg/Kg		107	70 - 125	2	30
Bromodichloromethane	0.0500	0.0505		mg/Kg		101	67 - 129	2	30
Bromoform	0.0500	0.0447		mg/Kg		89	68 - 136	3	30
Bromomethane	0.0500	0.0438		mg/Kg		88	70 - 130	5	30
2-Butanone (MEK)	0.0500	0.0411		mg/Kg		82	47 - 138	2	30
Carbon disulfide	0.0500	0.0565		mg/Kg		113	70 - 129	3	30
Carbon tetrachloride	0.0500	0.0497		mg/Kg		99	75 - 125	2	30
Chlorobenzene	0.0500	0.0501		mg/Kg		100	50 - 150	1	30
Chloroethane	0.0500	0.0446		mg/Kg		89	75 - 125	0	30
Chloroform	0.0500	0.0519		mg/Kg		104	57 - 135	3	30
Chloromethane	0.0500	0.0463		mg/Kg		93	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0535		mg/Kg		107	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0500		mg/Kg		100	70 - 125	2	30
Dibromochloromethane	0.0500	0.0464		mg/Kg		93	69 - 125	2	30
1,1-Dichloroethane	0.0500	0.0498		mg/Kg		100	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0477		mg/Kg		95	70 - 130	0	30
1,1-Dichloroethene	0.0500	0.0559		mg/Kg		112	70 - 120	4	30
1,2-Dichloropropane	0.0500	0.0516		mg/Kg		103	70 - 125	0	30
Ethylbenzene	0.0500	0.0507		mg/Kg		101	61 - 136	0	30
2-Hexanone	0.0500	0.0424		mg/Kg		85	48 - 146	5	30
Methylene Chloride	0.0500	0.0502		mg/Kg		100	70 - 126	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0428		mg/Kg		86	50 - 148	1	30
Methyl tert-butyl ether	0.0500	0.0470		mg/Kg		94	50 - 140	1	30
Styrene	0.0500	0.0474		mg/Kg		95	70 - 125	2	30
1,1,1,2-Tetrachloroethane	0.0500	0.0468		mg/Kg		94	70 - 122	1	30
Tetrachloroethene	0.0500	0.0541		mg/Kg		108	70 - 124	2	30
Toluene	0.0500	0.0525		mg/Kg		105	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0557		mg/Kg		111	70 - 125	3	30
trans-1,3-Dichloropropene	0.0500	0.0499		mg/Kg		100	70 - 125	1	30
1,1,1-Trichloroethane	0.0500	0.0512		mg/Kg		102	70 - 128	5	30
1,1,2-Trichloroethane	0.0500	0.0506		mg/Kg		101	70 - 125	1	30
Trichloroethene	0.0500	0.0522		mg/Kg		104	70 - 125	3	30
Vinyl acetate	0.0500	0.0568		mg/Kg		114	40 - 153	1	30
Vinyl chloride	0.0500	0.0513		mg/Kg		103	70 - 125	1	30
Xylenes, Total	0.100	0.101		mg/Kg		101	53 - 147	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	91		75 - 126
1,2-Dichloroethane-d4 (Surr)	81		70 - 134
Toluene-d8 (Surr)	99		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-422599/1-A

Matrix: Solid

Analysis Batch: 422661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Carbazole	<0.17		0.17	0.083	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Isophorone	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1

TestAmerica Chicago



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422599/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Phenol	<0.17		0.17	0.074	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		03/07/18 17:47	03/08/18 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		44 - 121	03/07/18 17:47	03/08/18 12:11	1
2-Fluorophenol	96		46 - 133	03/07/18 17:47	03/08/18 12:11	1
Nitrobenzene-d5	86		41 - 120	03/07/18 17:47	03/08/18 12:11	1
Phenol-d5	95		46 - 125	03/07/18 17:47	03/08/18 12:11	1
Terphenyl-d14	92		35 - 160	03/07/18 17:47	03/08/18 12:11	1
2,4,6-Tribromophenol	73		25 - 139	03/07/18 17:47	03/08/18 12:11	1

**Lab Sample ID: LCS 500-422599/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.33	1.22		mg/Kg		91	58 - 110
Acenaphthylene	1.33	1.29		mg/Kg		97	60 - 110
Anthracene	1.33	1.28		mg/Kg		96	63 - 110
Benzo[a]anthracene	1.33	1.26		mg/Kg		94	63 - 110
Benzo[a]pyrene	1.33	1.19		mg/Kg		89	61 - 120
Benzo[b]fluoranthene	1.33	1.18		mg/Kg		88	62 - 120
Benzo[g,h,i]perylene	1.33	1.29		mg/Kg		97	64 - 120
Benzo[k]fluoranthene	1.33	1.22		mg/Kg		91	65 - 120
Bis(2-chloroethoxy)methane	1.33	1.19		mg/Kg		89	60 - 112
Bis(2-chloroethyl)ether	1.33	1.16		mg/Kg		87	55 - 111
Bis(2-ethylhexyl) phthalate	1.33	1.23		mg/Kg		92	63 - 118
4-Bromophenyl phenyl ether	1.33	1.26		mg/Kg		95	63 - 110
Butyl benzyl phthalate	1.33	1.25		mg/Kg		94	61 - 116
Carbazole	1.33	1.61		mg/Kg		121	59 - 158
4-Chloroaniline	1.33	1.06		mg/Kg		80	30 - 150
4-Chloro-3-methylphenol	1.33	1.15		mg/Kg		86	61 - 114
2-Chloronaphthalene	1.33	1.21		mg/Kg		90	64 - 110
2-Chlorophenol	1.33	1.24		mg/Kg		93	64 - 110

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422599/2-A**

**Matrix: Solid**

**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorophenyl phenyl ether	1.33	1.24		mg/Kg		93	63 - 110
Chrysene	1.33	1.29		mg/Kg		97	63 - 120
Dibenz(a,h)anthracene	1.33	1.21		mg/Kg		91	64 - 119
Dibenzofuran	1.33	1.19		mg/Kg		90	64 - 110
1,2-Dichlorobenzene	1.33	1.15		mg/Kg		86	62 - 110
1,3-Dichlorobenzene	1.33	1.12		mg/Kg		84	60 - 110
1,4-Dichlorobenzene	1.33	1.15		mg/Kg		86	61 - 110
3,3'-Dichlorobenzidine	1.33	1.18		mg/Kg		89	49 - 112
2,4-Dichlorophenol	1.33	1.22		mg/Kg		91	58 - 120
Diethyl phthalate	1.33	1.25		mg/Kg		94	58 - 120
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	60 - 110
Dimethyl phthalate	1.33	1.20		mg/Kg		90	64 - 110
Di-n-butyl phthalate	1.33	1.26		mg/Kg		95	65 - 120
4,6-Dinitro-2-methylphenol	2.67	1.61		mg/Kg		60	10 - 110
2,4-Dinitrophenol	2.67	1.00		mg/Kg		37	10 - 100
2,4-Dinitrotoluene	1.33	1.14		mg/Kg		86	62 - 117
2,6-Dinitrotoluene	1.33	1.17		mg/Kg		87	67 - 120
Di-n-octyl phthalate	1.33	1.26		mg/Kg		95	63 - 119
Fluoranthene	1.33	1.31		mg/Kg		98	62 - 120
Fluorene	1.33	1.22		mg/Kg		91	62 - 120
Hexachlorobenzene	1.33	1.35		mg/Kg		101	55 - 117
Hexachlorobutadiene	1.33	1.18		mg/Kg		89	56 - 120
Hexachlorocyclopentadiene	1.33	0.939		mg/Kg		70	10 - 106
Hexachloroethane	1.33	1.11		mg/Kg		83	61 - 110
Indeno[1,2,3-cd]pyrene	1.33	1.22		mg/Kg		91	57 - 127
Isophorone	1.33	1.08		mg/Kg		81	55 - 110
2-Methylnaphthalene	1.33	1.23		mg/Kg		92	62 - 110
2-Methylphenol	1.33	1.18		mg/Kg		89	60 - 120
3 & 4 Methylphenol	1.33	1.18		mg/Kg		88	57 - 120
Naphthalene	1.33	1.20		mg/Kg		90	63 - 110
2-Nitroaniline	1.33	1.12		mg/Kg		84	57 - 124
3-Nitroaniline	1.33	0.982		mg/Kg		74	40 - 122
4-Nitroaniline	1.33	1.22		mg/Kg		92	60 - 160
Nitrobenzene	1.33	1.19		mg/Kg		89	60 - 116
2-Nitrophenol	1.33	1.19		mg/Kg		89	60 - 120
4-Nitrophenol	2.67	2.23		mg/Kg		83	30 - 122
N-Nitrosodi-n-propylamine	1.33	1.17		mg/Kg		88	56 - 118
N-Nitrosodiphenylamine	1.33	1.37		mg/Kg		102	65 - 112
2,2'-oxybis[1-chloropropane]	1.33	0.990		mg/Kg		74	40 - 124
Pentachlorophenol	2.67	2.18		mg/Kg		82	13 - 112
Phenanthrene	1.33	1.25		mg/Kg		94	62 - 120
Phenol	1.33	1.18		mg/Kg		89	56 - 122
Pyrene	1.33	1.28		mg/Kg		96	63 - 120
1,2,4-Trichlorobenzene	1.33	1.23		mg/Kg		92	62 - 110
2,4,5-Trichlorophenol	1.33	1.23		mg/Kg		92	50 - 120
2,4,6-Trichlorophenol	1.33	1.25		mg/Kg		93	57 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422599/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	94		44 - 121
2-Fluorophenol	99		46 - 133
Nitrobenzene-d5	95		41 - 120
Phenol-d5	100		46 - 125
Terphenyl-d14	91		35 - 160
2,4,6-Tribromophenol	87		25 - 139

**Lab Sample ID: MB 500-422635/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422826**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422635**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Carbazole	<0.17		0.17	0.083	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		03/08/18 07:14	03/09/18 10:43	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422635/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422826**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422635**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Isophorone	<0.17		0.17	0.037	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Phenol	<0.17		0.17	0.074	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		03/08/18 07:14	03/09/18 10:43	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		03/08/18 07:14	03/09/18 10:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		44 - 121	03/08/18 07:14	03/09/18 10:43	1
2-Fluorophenol	98		46 - 133	03/08/18 07:14	03/09/18 10:43	1
Nitrobenzene-d5	89		41 - 120	03/08/18 07:14	03/09/18 10:43	1
Phenol-d5	98		46 - 125	03/08/18 07:14	03/09/18 10:43	1
Terphenyl-d14	74		35 - 160	03/08/18 07:14	03/09/18 10:43	1
2,4,6-Tribromophenol	63		25 - 139	03/08/18 07:14	03/09/18 10:43	1

**Lab Sample ID: LCS 500-422635/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422826**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.33	1.30		mg/Kg		97	58 - 110
Acenaphthylene	1.33	1.30		mg/Kg		97	60 - 110
Anthracene	1.33	1.26		mg/Kg		95	63 - 110
Benzo[a]anthracene	1.33	1.27		mg/Kg		95	63 - 110
Benzo[a]pyrene	1.33	1.22		mg/Kg		92	61 - 120
Benzo[b]fluoranthene	1.33	1.32		mg/Kg		99	62 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422635/2-A**

**Matrix: Solid**

**Analysis Batch: 422826**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 422635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	1.33	1.22		mg/Kg		92	64 - 120
Benzo[k]fluoranthene	1.33	1.27		mg/Kg		95	65 - 120
Bis(2-chloroethoxy)methane	1.33	1.25		mg/Kg		93	60 - 112
Bis(2-chloroethyl)ether	1.33	1.29		mg/Kg		97	55 - 111
Bis(2-ethylhexyl) phthalate	1.33	1.26		mg/Kg		95	63 - 118
4-Bromophenyl phenyl ether	1.33	1.19		mg/Kg		89	63 - 110
Butyl benzyl phthalate	1.33	1.16		mg/Kg		87	61 - 116
Carbazole	1.33	1.37		mg/Kg		103	59 - 158
4-Chloroaniline	1.33	1.03		mg/Kg		77	30 - 150
4-Chloro-3-methylphenol	1.33	1.27		mg/Kg		95	61 - 114
2-Chloronaphthalene	1.33	1.26		mg/Kg		95	64 - 110
2-Chlorophenol	1.33	1.28		mg/Kg		96	64 - 110
4-Chlorophenyl phenyl ether	1.33	1.23		mg/Kg		92	63 - 110
Chrysene	1.33	1.19		mg/Kg		89	63 - 120
Dibenz(a,h)anthracene	1.33	1.21		mg/Kg		90	64 - 119
Dibenzofuran	1.33	1.22		mg/Kg		92	64 - 110
1,2-Dichlorobenzene	1.33	1.20		mg/Kg		90	62 - 110
1,3-Dichlorobenzene	1.33	1.17		mg/Kg		87	60 - 110
1,4-Dichlorobenzene	1.33	1.22		mg/Kg		91	61 - 110
3,3'-Dichlorobenzidine	1.33	1.07		mg/Kg		80	49 - 112
2,4-Dichlorophenol	1.33	1.24		mg/Kg		93	58 - 120
Diethyl phthalate	1.33	1.30		mg/Kg		98	58 - 120
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	60 - 110
Dimethyl phthalate	1.33	1.21		mg/Kg		91	64 - 110
Di-n-butyl phthalate	1.33	1.27		mg/Kg		95	65 - 120
4,6-Dinitro-2-methylphenol	2.67	1.29		mg/Kg		49	10 - 110
2,4-Dinitrophenol	2.67	0.666	J	mg/Kg		25	10 - 100
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		94	62 - 117
2,6-Dinitrotoluene	1.33	1.29		mg/Kg		97	67 - 120
Di-n-octyl phthalate	1.33	1.35		mg/Kg		101	63 - 119
Fluoranthene	1.33	1.30		mg/Kg		97	62 - 120
Fluorene	1.33	1.28		mg/Kg		96	62 - 120
Hexachlorobenzene	1.33	1.12		mg/Kg		84	55 - 117
Hexachlorobutadiene	1.33	1.16		mg/Kg		87	56 - 120
Hexachlorocyclopentadiene	1.33	0.399	J	mg/Kg		30	10 - 106
Hexachloroethane	1.33	1.13		mg/Kg		85	61 - 110
Indeno[1,2,3-cd]pyrene	1.33	1.21		mg/Kg		91	57 - 127
Isophorone	1.33	1.11		mg/Kg		83	55 - 110
2-Methylnaphthalene	1.33	1.24		mg/Kg		93	62 - 110
2-Methylphenol	1.33	1.25		mg/Kg		94	60 - 120
3 & 4 Methylphenol	1.33	1.34		mg/Kg		100	57 - 120
Naphthalene	1.33	1.20		mg/Kg		90	63 - 110
2-Nitroaniline	1.33	1.34		mg/Kg		100	57 - 124
3-Nitroaniline	1.33	1.05		mg/Kg		79	40 - 122
4-Nitroaniline	1.33	1.26		mg/Kg		95	60 - 160
Nitrobenzene	1.33	1.23		mg/Kg		92	60 - 116
2-Nitrophenol	1.33	1.25		mg/Kg		94	60 - 120
4-Nitrophenol	2.67	1.72		mg/Kg		65	30 - 122

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422635/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422826**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
N-Nitrosodi-n-propylamine	1.33	1.32		mg/Kg		99	56 - 118
N-Nitrosodiphenylamine	1.33	1.28		mg/Kg		96	65 - 112
2,2'-oxybis[1-chloropropane]	1.33	1.30		mg/Kg		97	40 - 124
Pentachlorophenol	2.67	1.38		mg/Kg		52	13 - 112
Phenanthrene	1.33	1.24		mg/Kg		93	62 - 120
Phenol	1.33	1.51		mg/Kg		114	56 - 122
Pyrene	1.33	1.19		mg/Kg		89	63 - 120
1,2,4-Trichlorobenzene	1.33	1.18		mg/Kg		89	62 - 110
2,4,5-Trichlorophenol	1.33	1.19		mg/Kg		89	50 - 120
2,4,6-Trichlorophenol	1.33	1.17		mg/Kg		88	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	95		44 - 121
2-Fluorophenol	110		46 - 133
Nitrobenzene-d5	90		41 - 120
Phenol-d5	105		46 - 125
Terphenyl-d14	79		35 - 160
2,4,6-Tribromophenol	79		25 - 139

**Lab Sample ID: 500-141817-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 422826**

**Client Sample ID: 2490V2-3-B01 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422635**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	<0.037		1.49	1.40		mg/Kg	☼	94	58 - 110
Acenaphthylene	<0.037		1.49	1.35		mg/Kg	☼	90	60 - 110
Anthracene	<0.037		1.49	1.39		mg/Kg	☼	93	63 - 110
Benzo[a]anthracene	0.024	J	1.49	1.42		mg/Kg	☼	93	63 - 110
Benzo[a]pyrene	0.055		1.49	1.40		mg/Kg	☼	90	61 - 120
Benzo[b]fluoranthene	0.057	F1	1.49	1.97	F1	mg/Kg	☼	128	62 - 120
Benzo[g,h,i]perylene	0.033	J F1	1.49	0.657	F1	mg/Kg	☼	42	64 - 120
Benzo[k]fluoranthene	0.018	J	1.49	1.77		mg/Kg	☼	117	65 - 120
Bis(2-chloroethoxy)methane	<0.19		1.49	1.26		mg/Kg	☼	85	60 - 112
Bis(2-chloroethyl)ether	<0.19		1.49	1.26		mg/Kg	☼	84	55 - 111
Bis(2-ethylhexyl) phthalate	<0.19	F1	1.49	1.88	F1	mg/Kg	☼	126	63 - 118
4-Bromophenyl phenyl ether	<0.19		1.49	1.31		mg/Kg	☼	88	63 - 110
Butyl benzyl phthalate	<0.19	F1	1.49	1.75	F1	mg/Kg	☼	117	61 - 116
Carbazole	<0.19		1.49	1.53		mg/Kg	☼	103	59 - 158
4-Chloroaniline	<0.75		1.49	0.774		mg/Kg	☼	52	30 - 150
4-Chloro-3-methylphenol	<0.37		1.49	1.36		mg/Kg	☼	91	61 - 114
2-Chloronaphthalene	<0.19		1.49	1.31		mg/Kg	☼	88	64 - 110
2-Chlorophenol	<0.19		1.49	1.31		mg/Kg	☼	88	64 - 110
4-Chlorophenyl phenyl ether	<0.19		1.49	1.34		mg/Kg	☼	90	63 - 110
Chrysene	0.034	J	1.49	1.29		mg/Kg	☼	84	63 - 120
Dibenz(a,h)anthracene	0.028	J F1	1.49	0.777	F1	mg/Kg	☼	50	64 - 119
Dibenzofuran	<0.19		1.49	1.33		mg/Kg	☼	89	64 - 110
1,2-Dichlorobenzene	<0.19		1.49	1.14		mg/Kg	☼	77	62 - 110
1,3-Dichlorobenzene	<0.19		1.49	1.13		mg/Kg	☼	76	60 - 110

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-141817-1 MS

Matrix: Solid

Analysis Batch: 422826

Client Sample ID: 2490V2-3-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 422635

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1,4-Dichlorobenzene	<0.19		1.49	1.15		mg/Kg	☼	77	61 - 110
3,3'-Dichlorobenzidine	<0.19		1.49	0.781		mg/Kg	☼	52	49 - 112
2,4-Dichlorophenol	<0.37		1.49	1.29		mg/Kg	☼	87	58 - 120
Diethyl phthalate	<0.19		1.49	1.42		mg/Kg	☼	95	58 - 120
2,4-Dimethylphenol	<0.37		1.49	1.23		mg/Kg	☼	82	60 - 110
Dimethyl phthalate	<0.19		1.49	1.28		mg/Kg	☼	86	64 - 110
Di-n-butyl phthalate	<0.19		1.49	1.37		mg/Kg	☼	92	65 - 120
4,6-Dinitro-2-methylphenol	<0.75	F1	2.98	<0.75	F1	mg/Kg	☼	0	10 - 110
2,4-Dinitrophenol	<0.75	F1	2.98	<0.75	F1	mg/Kg	☼	0	10 - 100
2,4-Dinitrotoluene	<0.19		1.49	1.23		mg/Kg	☼	83	62 - 117
2,6-Dinitrotoluene	<0.19		1.49	1.35		mg/Kg	☼	90	67 - 120
Di-n-octyl phthalate	<0.19		1.49	1.21		mg/Kg	☼	81	63 - 119
Fluoranthene	0.050		1.49	1.40		mg/Kg	☼	91	62 - 120
Fluorene	<0.037		1.49	1.39		mg/Kg	☼	93	62 - 120
Hexachlorobenzene	<0.075		1.49	1.21		mg/Kg	☼	81	55 - 117
Hexachlorobutadiene	<0.19		1.49	1.10		mg/Kg	☼	74	56 - 120
Hexachlorocyclopentadiene	<0.75	F1	1.49	<0.75	F1	mg/Kg	☼	0	10 - 106
Hexachloroethane	<0.19	F1	1.49	0.848	F1	mg/Kg	☼	57	61 - 110
Indeno[1,2,3-cd]pyrene	0.033	J F1	1.49	0.781	F1	mg/Kg	☼	50	57 - 127
Isophorone	<0.19		1.49	1.08		mg/Kg	☼	73	55 - 110
2-Methylnaphthalene	<0.075		1.49	1.30		mg/Kg	☼	87	62 - 110
2-Methylphenol	<0.19		1.49	1.35		mg/Kg	☼	91	60 - 120
3 & 4 Methylphenol	<0.19		1.49	1.29		mg/Kg	☼	86	57 - 120
Naphthalene	<0.037		1.49	1.20		mg/Kg	☼	80	63 - 110
2-Nitroaniline	<0.19		1.49	1.43		mg/Kg	☼	96	57 - 124
3-Nitroaniline	<0.37		1.49	1.37		mg/Kg	☼	92	40 - 122
4-Nitroaniline	<0.37		1.49	1.26		mg/Kg	☼	84	60 - 160
Nitrobenzene	<0.037		1.49	1.22		mg/Kg	☼	82	60 - 116
2-Nitrophenol	<0.37		1.49	1.18		mg/Kg	☼	79	60 - 120
4-Nitrophenol	<0.75		2.98	2.29		mg/Kg	☼	77	30 - 122
N-Nitrosodi-n-propylamine	<0.075		1.49	1.28		mg/Kg	☼	86	56 - 118
N-Nitrosodiphenylamine	<0.19		1.49	1.39		mg/Kg	☼	93	65 - 112
2,2'-oxybis[1-chloropropane]	<0.19		1.49	1.31		mg/Kg	☼	88	40 - 124
Pentachlorophenol	<0.75		2.98	1.23		mg/Kg	☼	41	13 - 112
Phenanthrene	0.025	J	1.49	1.40		mg/Kg	☼	92	62 - 120
Phenol	<0.19		1.49	1.41		mg/Kg	☼	95	56 - 122
Pyrene	0.049		1.49	1.81		mg/Kg	☼	118	63 - 120
1,2,4-Trichlorobenzene	<0.19		1.49	1.15		mg/Kg	☼	77	62 - 110
2,4,5-Trichlorophenol	<0.37		1.49	1.51		mg/Kg	☼	101	50 - 120
2,4,6-Trichlorophenol	<0.37		1.49	1.33		mg/Kg	☼	89	57 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	85		44 - 121
2-Fluorophenol	96		46 - 133
Nitrobenzene-d5	77		41 - 120
Phenol-d5	97		46 - 125
Terphenyl-d14	107		35 - 160
2,4,6-Tribromophenol	77		25 - 139

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Lab Sample ID: 500-141817-1 MSD**

**Matrix: Solid**

**Analysis Batch: 422826**

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422635**

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
	Result			Result					Limits		
Acenaphthene	<0.037		1.54	1.36		mg/Kg	☼	88	58 - 110	3	30
Acenaphthylene	<0.037		1.54	1.31		mg/Kg	☼	85	60 - 110	3	30
Anthracene	<0.037		1.54	1.37		mg/Kg	☼	89	63 - 110	2	30
Benzo[a]anthracene	0.024	J	1.54	1.38		mg/Kg	☼	88	63 - 110	2	30
Benzo[a]pyrene	0.055		1.54	1.37		mg/Kg	☼	85	61 - 120	2	30
Benzo[b]fluoranthene	0.057	F1	1.54	1.89		mg/Kg	☼	119	62 - 120	4	30
Benzo[g,h,i]perylene	0.033	J F1	1.54	0.647	F1	mg/Kg	☼	40	64 - 120	2	30
Benzo[k]fluoranthene	0.018	J	1.54	1.76		mg/Kg	☼	113	65 - 120	1	30
Bis(2-chloroethoxy)methane	<0.19		1.54	1.26		mg/Kg	☼	82	60 - 112	0	30
Bis(2-chloroethyl)ether	<0.19		1.54	1.25		mg/Kg	☼	81	55 - 111	1	30
Bis(2-ethylhexyl) phthalate	<0.19	F1	1.54	1.86	F1	mg/Kg	☼	121	63 - 118	1	30
4-Bromophenyl phenyl ether	<0.19		1.54	1.27		mg/Kg	☼	83	63 - 110	3	30
Butyl benzyl phthalate	<0.19	F1	1.54	1.72		mg/Kg	☼	112	61 - 116	2	30
Carbazole	<0.19		1.54	1.50		mg/Kg	☼	97	59 - 158	2	30
4-Chloroaniline	<0.75		1.54	0.763	J	mg/Kg	☼	50	30 - 150	1	30
4-Chloro-3-methylphenol	<0.37		1.54	1.33		mg/Kg	☼	86	61 - 114	3	30
2-Chloronaphthalene	<0.19		1.54	1.29		mg/Kg	☼	84	64 - 110	1	30
2-Chlorophenol	<0.19		1.54	1.28		mg/Kg	☼	83	64 - 110	2	30
4-Chlorophenyl phenyl ether	<0.19		1.54	1.30		mg/Kg	☼	84	63 - 110	3	30
Chrysene	0.034	J	1.54	1.27		mg/Kg	☼	80	63 - 120	2	30
Dibenz(a,h)anthracene	0.028	J F1	1.54	0.758	F1	mg/Kg	☼	47	64 - 119	2	30
Dibenzofuran	<0.19		1.54	1.30		mg/Kg	☼	84	64 - 110	2	30
1,2-Dichlorobenzene	<0.19		1.54	1.13		mg/Kg	☼	73	62 - 110	2	30
1,3-Dichlorobenzene	<0.19		1.54	1.11		mg/Kg	☼	72	60 - 110	2	30
1,4-Dichlorobenzene	<0.19		1.54	1.15		mg/Kg	☼	75	61 - 110	0	30
3,3'-Dichlorobenzidine	<0.19		1.54	0.816		mg/Kg	☼	53	49 - 112	4	30
2,4-Dichlorophenol	<0.37		1.54	1.26		mg/Kg	☼	82	58 - 120	3	30
Diethyl phthalate	<0.19		1.54	1.38		mg/Kg	☼	90	58 - 120	3	30
2,4-Dimethylphenol	<0.37		1.54	1.21		mg/Kg	☼	79	60 - 110	1	30
Dimethyl phthalate	<0.19		1.54	1.25		mg/Kg	☼	81	64 - 110	2	30
Di-n-butyl phthalate	<0.19		1.54	1.37		mg/Kg	☼	89	65 - 120	1	30
4,6-Dinitro-2-methylphenol	<0.75	F1	3.08	<0.77	F1	mg/Kg	☼	0	10 - 110	NC	30
2,4-Dinitrophenol	<0.75	F1	3.08	<0.77	F1	mg/Kg	☼	0	10 - 100	NC	30
2,4-Dinitrotoluene	<0.19		1.54	1.21		mg/Kg	☼	79	62 - 117	2	30
2,6-Dinitrotoluene	<0.19		1.54	1.29		mg/Kg	☼	84	67 - 120	4	30
Di-n-octyl phthalate	<0.19		1.54	1.19		mg/Kg	☼	78	63 - 119	1	30
Fluoranthene	0.050		1.54	1.38		mg/Kg	☼	87	62 - 120	1	30
Fluorene	<0.037		1.54	1.35		mg/Kg	☼	88	62 - 120	3	30
Hexachlorobenzene	<0.075		1.54	1.19		mg/Kg	☼	77	55 - 117	2	30
Hexachlorobutadiene	<0.19		1.54	1.11		mg/Kg	☼	72	56 - 120	0	30
Hexachlorocyclopentadiene	<0.75	F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 106	NC	30
Hexachloroethane	<0.19	F1	1.54	0.827	F1	mg/Kg	☼	54	61 - 110	3	30
Indeno[1,2,3-cd]pyrene	0.033	J F1	1.54	0.749	F1	mg/Kg	☼	47	57 - 127	4	30
Isophorone	<0.19		1.54	1.08		mg/Kg	☼	70	55 - 110	0	30
2-Methylnaphthalene	<0.075		1.54	1.28		mg/Kg	☼	83	62 - 110	2	30
2-Methylphenol	<0.19		1.54	1.30		mg/Kg	☼	84	60 - 120	4	30
3 & 4 Methylphenol	<0.19		1.54	1.27		mg/Kg	☼	83	57 - 120	1	30
Naphthalene	<0.037		1.54	1.19		mg/Kg	☼	77	63 - 110	1	30
2-Nitroaniline	<0.19		1.54	1.39		mg/Kg	☼	91	57 - 124	3	30
3-Nitroaniline	<0.37		1.54	1.36		mg/Kg	☼	88	40 - 122	1	30

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-141817-1 MSD

Matrix: Solid

Analysis Batch: 422826

Client Sample ID: 2490V2-3-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 422635

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
4-Nitroaniline	<0.37		1.54	1.28		mg/Kg	*	83	60 - 160	2	30	
Nitrobenzene	<0.037		1.54	1.20		mg/Kg	*	78	60 - 116	2	30	
2-Nitrophenol	<0.37		1.54	1.17		mg/Kg	*	76	60 - 120	1	30	
4-Nitrophenol	<0.75		3.08	1.77		mg/Kg	*	57	30 - 122	26	30	
N-Nitrosodi-n-propylamine	<0.075		1.54	1.27		mg/Kg	*	82	56 - 118	1	30	
N-Nitrosodiphenylamine	<0.19		1.54	1.36		mg/Kg	*	89	65 - 112	2	30	
2,2'-oxybis[1-chloropropane]	<0.19		1.54	1.29		mg/Kg	*	84	40 - 124	2	30	
Pentachlorophenol	<0.75		3.08	1.13		mg/Kg	*	37	13 - 112	9	30	
Phenanthrene	0.025	J	1.54	1.36		mg/Kg	*	87	62 - 120	3	30	
Phenol	<0.19		1.54	1.38		mg/Kg	*	90	56 - 122	2	30	
Pyrene	0.049		1.54	1.78		mg/Kg	*	112	63 - 120	2	30	
1,2,4-Trichlorobenzene	<0.19		1.54	1.16		mg/Kg	*	75	62 - 110	1	30	
2,4,5-Trichlorophenol	<0.37		1.54	1.46		mg/Kg	*	95	50 - 120	3	30	
2,4,6-Trichlorophenol	<0.37		1.54	1.31		mg/Kg	*	85	57 - 120	1	30	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	81		44 - 121
2-Fluorophenol	93		46 - 133
Nitrobenzene-d5	73		41 - 120
Phenol-d5	91		46 - 125
Terphenyl-d14	104		35 - 160
2,4,6-Tribromophenol	71		25 - 139

## Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-422763/1-A

Matrix: Solid

Analysis Batch: 423236

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422763

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Arsenic	<1.0		1.0	0.34	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Barium	<1.0		1.0	0.11	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Beryllium	<0.40		0.40	0.093	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Cadmium	0.0805	J	0.20	0.036	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Chromium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Cobalt	<0.50		0.50	0.13	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Copper	<1.0		1.0	0.28	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Iron	<20		20	10	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Lead	<0.50		0.50	0.23	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Magnesium	<10		10	5.0	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Calcium	10.2	J	20	3.4	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Manganese	<1.0		1.0	0.15	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Nickel	<1.0		1.0	0.29	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Selenium	<1.0		1.0	0.59	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Silver	<0.50		0.50	0.13	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Thallium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Vanadium	<0.50		0.50	0.12	mg/Kg		03/08/18 17:14	03/13/18 00:11	1

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-422763/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422763**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.927	J	2.0	0.88	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Potassium	<50		50	18	mg/Kg		03/08/18 17:14	03/13/18 00:11	1
Sodium	<100		100	15	mg/Kg		03/08/18 17:14	03/13/18 00:11	1

**Lab Sample ID: LCS 500-422763/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422763**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.9		mg/Kg		92	80 - 120
Arsenic	10.0	8.93		mg/Kg		89	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.61		mg/Kg		92	80 - 120
Cadmium	5.00	4.64		mg/Kg		93	80 - 120
Chromium	20.0	18.7		mg/Kg		94	80 - 120
Cobalt	50.0	47.1		mg/Kg		94	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Lead	10.0	8.79		mg/Kg		88	80 - 120
Magnesium	1000	927		mg/Kg		93	80 - 120
Calcium	1000	931		mg/Kg		93	80 - 120
Manganese	50.0	46.8		mg/Kg		94	80 - 120
Nickel	50.0	46.5		mg/Kg		93	80 - 120
Selenium	10.0	8.85		mg/Kg		89	80 - 120
Silver	5.00	4.52		mg/Kg		90	80 - 120
Thallium	10.0	8.76		mg/Kg		88	80 - 120
Vanadium	50.0	47.2		mg/Kg		94	80 - 120
Zinc	50.0	45.9		mg/Kg		92	80 - 120
Potassium	1000	974		mg/Kg		97	80 - 120
Sodium	1000	1020		mg/Kg		102	80 - 120

**Lab Sample ID: 500-141817-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: 2490V2-3-B01 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422763**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<1.1	F1 F2	28.1	6.73	F1	mg/Kg	☼	24	75 - 125
Arsenic	4.1	F1	5.61	8.71		mg/Kg	☼	81	75 - 125
Barium	45		112	141		mg/Kg	☼	85	75 - 125
Beryllium	0.42		2.81	2.83		mg/Kg	☼	86	75 - 125
Cadmium	0.17	B	2.81	2.58		mg/Kg	☼	86	75 - 125
Chromium	13	F1 F2	11.2	23.5		mg/Kg	☼	98	75 - 125
Cobalt	9.3		28.1	36.2		mg/Kg	☼	96	75 - 125
Copper	14		14.0	26.6		mg/Kg	☼	88	75 - 125
Iron	13000	F2	56.1	12100	4	mg/Kg	☼	-973	75 - 125
Lead	40	F2	5.61	55.0	4	mg/Kg	☼	272	75 - 125
Magnesium	11000	F2	561	16500	4	mg/Kg	☼	1030	75 - 125
Calcium	18000	B F2	561	25900	4	mg/Kg	☼	1456	75 - 125
Manganese	620		28.1	588	4	mg/Kg	☼	-104	75 - 125

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-141817-1 MS

Matrix: Solid

Analysis Batch: 423236

Client Sample ID: 2490V2-3-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 422763

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Nickel	15		28.1	40.4		mg/Kg	☼	92	75 - 125	
Selenium	0.63	F1	5.61	4.36	F1	mg/Kg	☼	67	75 - 125	
Silver	<0.28		2.81	2.31		mg/Kg	☼	82	75 - 125	
Thallium	<0.56		5.61	4.20		mg/Kg	☼	75	75 - 125	
Vanadium	20	F1	28.1	45.2		mg/Kg	☼	91	75 - 125	
Zinc	48	B F1 F2	28.1	79.3		mg/Kg	☼	112	75 - 125	
Potassium	800	F1	561	1770	F1	mg/Kg	☼	173	75 - 125	
Sodium	1100	F1	561	1530		mg/Kg	☼	84	75 - 125	

Lab Sample ID: 500-141817-1 MSD

Matrix: Solid

Analysis Batch: 423236

Client Sample ID: 2490V2-3-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 422763

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	<1.1	F1 F2	27.9	9.25	F1 F2	mg/Kg	☼	33	75 - 125	31	20	
Arsenic	4.1	F1	5.58	8.21	F1	mg/Kg	☼	73	75 - 125	6	20	
Barium	45		112	131		mg/Kg	☼	77	75 - 125	7	20	
Beryllium	0.42		2.79	2.88		mg/Kg	☼	88	75 - 125	2	20	
Cadmium	0.17	B	2.79	2.88		mg/Kg	☼	97	75 - 125	11	20	
Chromium	13	F1 F2	11.2	18.8	F1 F2	mg/Kg	☼	56	75 - 125	22	20	
Cobalt	9.3		27.9	34.2		mg/Kg	☼	89	75 - 125	6	20	
Copper	14		14.0	25.0		mg/Kg	☼	77	75 - 125	6	20	
Iron	13000	F2	55.8	8520	4 F2	mg/Kg	☼	-7336	75 - 125	34	20	
Lead	40	F2	5.58	41.7	4 F2	mg/Kg	☼	36	75 - 125	27	20	
Magnesium	11000	F2	558	51900	4 F2	mg/Kg	☼	7383	75 - 125	103	20	
Calcium	18000	B F2	558	83100	E 4 F2	mg/Kg	☼	11711	75 - 125	105	20	
Manganese	620		27.9	506	4	mg/Kg	☼	-399	75 - 125	15	20	
Nickel	15		27.9	35.5		mg/Kg	☼	75	75 - 125	13	20	
Selenium	0.63	F1	5.58	4.48	F1	mg/Kg	☼	69	75 - 125	3	20	
Silver	<0.28		2.79	2.78		mg/Kg	☼	100	75 - 125	18	20	
Thallium	<0.56		5.58	4.17		mg/Kg	☼	75	75 - 125	1	20	
Vanadium	20	F1	27.9	39.2	F1	mg/Kg	☼	69	75 - 125	14	20	
Zinc	48	B F1 F2	27.9	62.7	F1 F2	mg/Kg	☼	53	75 - 125	23	20	
Potassium	800	F1	558	1620	F1	mg/Kg	☼	146	75 - 125	9	20	
Sodium	1100	F1	558	1340	F1	mg/Kg	☼	50	75 - 125	13	20	

Lab Sample ID: 500-141817-1 DU

Matrix: Solid

Analysis Batch: 423236

Client Sample ID: 2490V2-3-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 422763

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	
	Result	Qualifier	Result	Qualifier				Limit	
Antimony	<1.1	F1 F2	<1.1		mg/Kg	☼		NC	20
Arsenic	4.1	F1	3.65		mg/Kg	☼		12	20
Barium	45		45.4		mg/Kg	☼		0.4	20
Beryllium	0.42		0.366		mg/Kg	☼		13	20
Cadmium	0.17	B	0.162		mg/Kg	☼		4	20
Chromium	13	F1 F2	11.1		mg/Kg	☼		12	20
Cobalt	9.3		9.75		mg/Kg	☼		4	20
Copper	14		12.5		mg/Kg	☼		12	20

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141817-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: 2490V2-3-B01 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422763**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Iron	13000	F2	10500		mg/Kg	☼	18	20
Lead	40	F2	52.7	F3	mg/Kg	☼	28	20
Magnesium	11000	F2	6650	F3	mg/Kg	☼	47	20
Calcium	18000	B F2	12800	F3	mg/Kg	☼	33	20
Manganese	620		555		mg/Kg	☼	11	20
Nickel	15		14.2		mg/Kg	☼	3	20
Selenium	0.63	F1	0.510	J F5	mg/Kg	☼	21	20
Silver	<0.28		<0.28		mg/Kg	☼	NC	20
Thallium	<0.56		<0.55		mg/Kg	☼	NC	20
Vanadium	20	F1	19.7		mg/Kg	☼	0.4	20
Zinc	48	B F1 F2	56.8		mg/Kg	☼	17	20
Potassium	800	F1	775		mg/Kg	☼	4	20
Sodium	1100	F1	909		mg/Kg	☼	15	20

**Lab Sample ID: MB 500-422764/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423068**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422764**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Arsenic	<1.0		1.0	0.34	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Barium	<1.0		1.0	0.11	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Beryllium	<0.40		0.40	0.093	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Cadmium	0.113	J	0.20	0.036	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Chromium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Cobalt	<0.50		0.50	0.13	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Copper	<1.0		1.0	0.28	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Iron	<20		20	10	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Lead	<0.50		0.50	0.23	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Magnesium	<10		10	5.0	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Calcium	4.64	J	20	3.4	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Manganese	<1.0		1.0	0.15	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Nickel	<1.0		1.0	0.29	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Selenium	<1.0		1.0	0.59	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Silver	<0.50		0.50	0.13	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Thallium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Vanadium	<0.50		0.50	0.12	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Zinc	<2.0		2.0	0.88	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Potassium	<50		50	18	mg/Kg		03/08/18 17:17	03/09/18 13:34	1
Sodium	<100		100	15	mg/Kg		03/08/18 17:17	03/09/18 13:34	1

**Lab Sample ID: LCS 500-422764/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423068**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422764**  
**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Antimony	50.0	45.6		mg/Kg		91	80 - 120
Arsenic	10.0	8.85		mg/Kg		88	80 - 120
Barium	200	192		mg/Kg		96	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-422764/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423068**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422764**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	5.00	4.62		mg/Kg		92	80 - 120
Cadmium	5.00	4.75		mg/Kg		95	80 - 120
Chromium	20.0	18.3		mg/Kg		92	80 - 120
Cobalt	50.0	46.0		mg/Kg		92	80 - 120
Copper	25.0	24.0		mg/Kg		96	80 - 120
Iron	100	97.9		mg/Kg		98	80 - 120
Lead	10.0	9.05		mg/Kg		91	80 - 120
Magnesium	1000	932		mg/Kg		93	80 - 120
Calcium	1000	909		mg/Kg		91	80 - 120
Manganese	50.0	46.2		mg/Kg		92	80 - 120
Nickel	50.0	45.5		mg/Kg		91	80 - 120
Selenium	10.0	8.93		mg/Kg		89	80 - 120
Silver	5.00	4.50		mg/Kg		90	80 - 120
Thallium	10.0	8.33		mg/Kg		83	80 - 120
Vanadium	50.0	46.0		mg/Kg		92	80 - 120
Zinc	50.0	44.7		mg/Kg		89	80 - 120
Potassium	1000	1020		mg/Kg		102	80 - 120
Sodium	1000	1040		mg/Kg		104	80 - 120

**Lab Sample ID: LCS 500-423096/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423096**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0992		mg/L		99	80 - 120
Barium	0.500	0.532		mg/L		106	80 - 120
Beryllium	0.0500	0.0539		mg/L		108	80 - 120
Cadmium	0.0500	0.0526		mg/L		105	80 - 120
Chromium	0.200	0.213		mg/L		107	80 - 120
Cobalt	0.500	0.524		mg/L		105	80 - 120
Copper	0.250	0.274		mg/L		109	80 - 120
Iron	1.00	1.13		mg/L		113	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Calcium	10.0	10.7		mg/L		107	80 - 120
Manganese	0.500	0.528		mg/L		106	80 - 120
Nickel	0.500	0.523		mg/L		105	80 - 120
Selenium	0.100	0.0917		mg/L		92	80 - 120
Silver	0.0500	0.0529		mg/L		106	80 - 120
Vanadium	0.500	0.537		mg/L		107	80 - 120
Zinc	0.500	0.513		mg/L		103	80 - 120
Potassium	10.0	10.5		mg/L		105	80 - 120

**Lab Sample ID: LCS 500-423170/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423170**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0927		mg/L		93	80 - 120

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-423170/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423170**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.506		mg/L		101	80 - 120
Beryllium	0.0500	0.0501		mg/L		100	80 - 120
Cadmium	0.0500	0.0492		mg/L		98	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.500	0.490		mg/L		98	80 - 120
Copper	0.250	0.260		mg/L		104	80 - 120
Iron	1.00	1.04		mg/L		104	80 - 120
Lead	0.100	0.0937		mg/L		94	80 - 120
Magnesium	10.0	9.69		mg/L		97	80 - 120
Calcium	10.0	10.1		mg/L		101	80 - 120
Manganese	0.500	0.499		mg/L		100	80 - 120
Nickel	0.500	0.488		mg/L		98	80 - 120
Selenium	0.100	0.0841		mg/L		84	80 - 120
Silver	0.0500	0.0488		mg/L		98	80 - 120
Vanadium	0.500	0.507		mg/L		101	80 - 120
Zinc	0.500	0.479	J	mg/L		96	80 - 120
Potassium	10.0	9.95		mg/L		99	80 - 120

**Lab Sample ID: LCS 500-423171/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423171**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.0956		mg/L		96	80 - 120
Manganese	0.500	0.494		mg/L		99	80 - 120

**Lab Sample ID: LCS 500-423172/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423172**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.500	0.498		mg/L		100	80 - 120

**Lab Sample ID: LB 500-422885/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050		0.050	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Barium	<0.50		0.50	0.050	mg/L		03/12/18 09:21	03/13/18 20:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/12/18 09:21	03/13/18 20:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/12/18 09:21	03/13/18 20:20	1
Chromium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Cobalt	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Copper	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Iron	<0.40		0.40	0.20	mg/L		03/12/18 09:21	03/13/18 20:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/12/18 09:21	03/13/18 20:20	1
Magnesium	<2.5		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:20	1
Calcium	<5.0		5.0	0.50	mg/L		03/12/18 09:21	03/13/18 20:20	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-422885/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Nickel	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Selenium	<0.050		0.050	0.020	mg/L		03/12/18 09:21	03/13/18 20:20	1
Silver	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Vanadium	<0.025		0.025	0.010	mg/L		03/12/18 09:21	03/13/18 20:20	1
Zinc	<0.50		0.50	0.020	mg/L		03/12/18 09:21	03/13/18 20:20	1
Potassium	<2.5		2.5	0.50	mg/L		03/12/18 09:21	03/13/18 20:20	1

**Lab Sample ID: 500-141817-20 MS**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Arsenic	<0.050		0.100	0.101		mg/L		101	75 - 125
Barium	0.27	J	0.500	0.819		mg/L		109	75 - 125
Beryllium	<0.0040		0.0500	0.0547		mg/L		109	75 - 125
Cadmium	<0.0050		0.0500	0.0541		mg/L		108	75 - 125
Chromium	<0.025		0.200	0.202		mg/L		101	75 - 125
Cobalt	<0.025		0.500	0.490		mg/L		98	75 - 125
Copper	<0.025	F1	0.250	0.321	F1	mg/L		128	75 - 125
Iron	<0.40		1.00	1.14		mg/L		114	75 - 125
Lead	<0.0075		0.100	0.0930		mg/L		93	75 - 125
Magnesium	31		10.0	42.9		mg/L		121	75 - 125
Manganese	0.63		0.500	1.17		mg/L		108	75 - 125
Nickel	<0.025		0.500	0.489		mg/L		98	75 - 125
Selenium	<0.050		0.100	0.102		mg/L		102	75 - 125
Silver	<0.025	F1	0.0500	0.0647	F1	mg/L		129	75 - 125
Vanadium	<0.025		0.500	0.532		mg/L		106	75 - 125
Zinc	<0.50		0.500	0.515		mg/L		103	75 - 125
Potassium	1.1	J	10.0	12.6		mg/L		115	75 - 125

**Lab Sample ID: 500-141817-20 MS**  
**Matrix: Solid**  
**Analysis Batch: 423594**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Calcium	740		10.0	851	4	mg/L		1121	75 - 125

**Lab Sample ID: 500-141817-20 DU**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	
			Result	Qualifier			RPD	Limit
Arsenic	<0.050		<0.050		mg/L		NC	20
Barium	0.27	J	0.276	J	mg/L		1	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	<0.025		<0.025		mg/L		NC	20

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141817-20 DU**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Copper	<0.025	F1	<0.025		mg/L		NC	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Magnesium	31		31.2		mg/L		1	20
Manganese	0.63		0.646		mg/L		2	20
Nickel	<0.025		<0.025		mg/L		NC	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025	F1	<0.025		mg/L		NC	20
Vanadium	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20
Potassium	1.1	J	1.11	J	mg/L		2	20

**Lab Sample ID: 500-141817-20 DU**  
**Matrix: Solid**  
**Analysis Batch: 423594**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	740		741		mg/L		0.3	20

**Lab Sample ID: LB 500-422889/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423413**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423170**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Barium	<0.50		0.50	0.050	mg/L		03/13/18 06:45	03/13/18 17:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 17:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 17:07	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 17:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 17:07	1
Magnesium	<2.5		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 17:07	1
Calcium	<5.0		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 17:07	1
Manganese	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 17:07	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 17:07	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 17:07	1
Potassium	<2.5		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 17:07	1

**Lab Sample ID: LB 500-422893/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 423171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 23:32	1

TestAmerica Chicago



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-422893/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 423171**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 23:32	1

**Lab Sample ID: 500-141817-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: 2490V2-3-B06 (10-15)**  
**Prep Type: SPLP East**  
**Prep Batch: 423171**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.0943		mg/L		94	75 - 125
Manganese	0.033		0.500	0.514		mg/L		96	75 - 125

**Lab Sample ID: 500-141817-6 DU**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: 2490V2-3-B06 (10-15)**  
**Prep Type: SPLP East**  
**Prep Batch: 423171**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.033		0.0318		mg/L		2	20

**Lab Sample ID: LB 500-422895/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423428**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 423172**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 01:59	1

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: LCS 500-423096/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423264**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423096**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.500		mg/L		100	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

**Lab Sample ID: LCS 500-423170/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423438**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423170**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.450		mg/L		90	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120

**Lab Sample ID: LB 500-422885/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423264**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/12/18 09:21	03/12/18 18:54	1

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LB 500-422885/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423264**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		03/12/18 09:21	03/12/18 18:54	1

**Lab Sample ID: 500-141817-20 MS**  
**Matrix: Solid**  
**Analysis Batch: 423264**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.508		mg/L		102	75 - 125
Thallium	<0.0020		0.100	0.117		mg/L		117	75 - 125

**Lab Sample ID: 500-141817-20 DU**  
**Matrix: Solid**  
**Analysis Batch: 423264**

**Client Sample ID: 2490V2-3-B17 (5-8)**  
**Prep Type: TCLP**  
**Prep Batch: 423096**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

**Lab Sample ID: LB 500-422889/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423438**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423170**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:32	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-423146/12-A**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423146**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:53	1

**Lab Sample ID: LCS 500-423146/13-A**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423146**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00185		mg/L		93	80 - 120

**Lab Sample ID: MB 500-423314/12-A**  
**Matrix: Solid**  
**Analysis Batch: 423474**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423314**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:48	1

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 7470A - TCLP Mercury (Continued)

**Lab Sample ID: LCS 500-423314/13-A**  
**Matrix: Solid**  
**Analysis Batch: 423474**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423314**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00205		mg/L		103	80 - 120

**Lab Sample ID: LB 500-422885/1-C**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423146**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:56	1

**Lab Sample ID: 500-141817-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: 2490V2-3-B01 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 423146**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000882		mg/L		88	75 - 125

**Lab Sample ID: 500-141817-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: 2490V2-3-B01 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 423146**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

**Lab Sample ID: LB 500-422889/1-D**  
**Matrix: Solid**  
**Analysis Batch: 423474**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423314**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:51	1

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-422730/11-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		03/08/18 14:55	03/09/18 10:05	1

**Lab Sample ID: LCS 500-422730/12-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.168		mg/Kg		101	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 7471B - Mercury (CVAA) (Continued)

**Lab Sample ID: 500-141817-23 MS**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.013	J	0.0939	0.111		mg/Kg	☼	104	75 - 125

**Lab Sample ID: 500-141817-23 MSD**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.013	J	0.0943	0.114		mg/Kg	☼	107	75 - 125	3	20

**Lab Sample ID: 500-141817-23 DU**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.013	J	0.0128	J	mg/Kg	☼	0.1	20

**Lab Sample ID: MB 500-422742/12-A**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**  
**Prep Batch: 422742**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		03/08/18 14:55	03/09/18 10:47	1

**Lab Sample ID: LCS 500-422742/13-A**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**  
**Prep Batch: 422742**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.173		mg/Kg		103	80 - 120

**Lab Sample ID: 500-141817-1 MS**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Prep Type: Total/NA**  
**Prep Batch: 422742**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.025		0.0930	0.127		mg/Kg	☼	109	75 - 125

**Lab Sample ID: 500-141817-1 MSD**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Prep Type: Total/NA**  
**Prep Batch: 422742**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.025		0.0924	0.119		mg/Kg	☼	102	75 - 125	6	20

**Lab Sample ID: 500-141817-1 DU**

**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Prep Type: Total/NA**  
**Prep Batch: 422742**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.025		0.0292		mg/Kg	☼	15	20

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 9014 - Cyanide

**Lab Sample ID: MB 500-422712/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422929**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422712**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg		03/08/18 15:20	03/09/18 15:30	1

**Lab Sample ID: LCS 500-422712/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422929**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422712**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	5.00	5.15		mg/Kg		103	80 - 120

**Lab Sample ID: MB 500-423266/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423337**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423266**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg		03/13/18 11:20	03/13/18 15:00	1

**Lab Sample ID: LCS 500-423266/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423337**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423266**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	5.00	5.28		mg/Kg		106	80 - 120

**Lab Sample ID: 500-141817-4 MS**  
**Matrix: Solid**  
**Analysis Batch: 423337**

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423266**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	<0.53		1.61	1.82		mg/Kg	☼	113	75 - 125

**Lab Sample ID: 500-141817-4 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423337**

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423266**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyanide, Total	<0.53		2.02	2.17		mg/Kg	☼	107	75 - 125	17	20

**Lab Sample ID: MB 500-423612/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423709**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423612**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg		03/15/18 10:15	03/15/18 15:36	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Method: 9014 - Cyanide (Continued)

Lab Sample ID: LCS 500-423612/2-A  
 Matrix: Solid  
 Analysis Batch: 423709

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 423612

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	5.00	5.36		mg/Kg		107	80 - 120

## Method: 9045D - pH

Lab Sample ID: 500-141817-1 DU  
 Matrix: Solid  
 Analysis Batch: 423441

Client Sample ID: 2490V2-3-B01 (0-5)  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.0		8.00		SU		0.1	

Lab Sample ID: 500-141817-20 DU  
 Matrix: Solid  
 Analysis Batch: 423441

Client Sample ID: 2490V2-3-B17 (5-8)  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.7		7.70		SU		0.3	

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/13/18 23:42	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:36	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:56	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 11:58	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
					(Start)	03/13/18 13:00		
					(End)	03/13/18 13:03		
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B01 (0-5)**

**Lab Sample ID: 500-141817-1**

**Date Collected: 03/06/18 14:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 18:23	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 15:36	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 00:21	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:56	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:31		
					(End)	03/09/18 15:32		

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/13/18 23:46	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:40	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:57	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:03	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
					(Start)	03/13/18 13:06		
					(End)	03/13/18 13:09		
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B02 (0-5)**

**Lab Sample ID: 500-141817-2**

**Date Collected: 03/06/18 13:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 18:48	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 16:00	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:28	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 00:54	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:05	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:32		
					(End)	03/09/18 15:32		

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:00	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:44	PJ1	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:58	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:08	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:09 (End) 03/13/18 13:12	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (0-5)**

**Lab Sample ID: 500-141817-3**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 19:13	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 18:27	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:32	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 00:59	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:07	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929	(Start) 03/09/18 15:32 (End) 03/09/18 15:33	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:05	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:48	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	423264	03/12/18 18:59	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:10	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:12 (End) 03/13/18 13:16	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (0-5) Dup**

**Lab Sample ID: 500-141817-4**

**Date Collected: 03/06/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 19:39	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 16:25	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:36	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:03	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:10	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:01 (End) 03/13/18 15:01	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:10	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:53	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:31	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:00	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:11	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:16 (End) 03/13/18 13:19	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (5-10)**

**Lab Sample ID: 500-141817-5**

**Date Collected: 03/06/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 20:04	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 13:34	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:40	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:08	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:12	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:02 (End) 03/13/18 15:02	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:14	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 20:57	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:35	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:01	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:13	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
					(Start)	03/13/18 13:19		
					(End)	03/13/18 13:22		
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B06 (10-15)**

**Lab Sample ID: 500-141817-6**

**Date Collected: 03/06/18 10:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 20:29	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 13:58	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:44	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:13	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:14	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337		MAN	TAL CHI
					(Start)	03/13/18 15:02		
					(End)	03/13/18 15:03		

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:33	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:01	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	423264	03/12/18 19:01	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:14	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:22 (End) 03/13/18 13:25	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B07 (0-5)**

**Lab Sample ID: 500-141817-7**

**Date Collected: 03/06/18 10:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 18:05	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 18:51	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:48	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:18	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:22	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:03 (End) 03/13/18 15:03	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:38	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:05	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:40	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:02	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:16	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:25 (End) 03/13/18 13:28	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B07 (5-10)**

**Lab Sample ID: 500-141817-8**

**Date Collected: 03/06/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 18:31	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 18:02	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 22:52	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:22	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:24	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:03 (End) 03/13/18 15:03	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:42	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:09	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:45	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:06	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:18	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:28 (End) 03/13/18 13:32	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B07 (10-15)**

**Lab Sample ID: 500-141817-9**

**Date Collected: 03/06/18 10:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 18:56	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 14:23	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:04	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:36	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:26	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:04 (End) 03/13/18 15:04	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 00:57	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:14	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	423264	03/12/18 19:07	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:19	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 13:32 (End) 03/13/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B08 (0-5)**

**Lab Sample ID: 500-141817-10**

**Date Collected: 03/06/18 09:35**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 19:21	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 14:47	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:41	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:28	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	(Start) 03/13/18 15:04 (End) 03/13/18 15:05	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:01	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:26	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:08	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:21	EEN	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:35 (Start) 03/13/18 13:38 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B09 (0-5)**

**Lab Sample ID: 500-141817-11**

**Date Collected: 03/06/18 09:25**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 19:46	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 16:49	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:08	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:46	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:30	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	03/13/18 15:05 (Start) 03/13/18 15:05 (End)	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

**Date Collected: 03/06/18 09:15**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:06	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:30	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:09	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:22	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

**Date Collected: 03/06/18 09:15**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:38 (Start) 03/13/18 13:41 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B10 (0-5)**

**Lab Sample ID: 500-141817-12**

**Date Collected: 03/06/18 09:15**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 20:12	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 11:57	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:12	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:51	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:33	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337	03/13/18 15:05 (Start) 03/13/18 15:05 (End)	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:10	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:34	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:09	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:27	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:41 (Start) 03/13/18 13:45 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B11 (0-5)**

**Lab Sample ID: 500-141817-13**

**Date Collected: 03/06/18 12:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422971	03/10/18 20:37	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 12:21	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 01:55	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:35	EEN	TAL CHI
Total/NA	Prep	9010B			423266	03/13/18 11:20	MAN	TAL CHI
Total/NA	Analysis	9014		1	423337		MAN	TAL CHI
						(Start) 03/13/18 15:05 (End) 03/13/18 15:06		

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:15	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:38	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:50	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:10	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:29	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:45 (Start) 03/13/18 13:48 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B11 (5-10)**

**Lab Sample ID: 500-141817-14**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 15:12	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 12:45	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:16	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:00	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:37	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709	03/15/18 15:37 (Start) 03/15/18 15:37 (End)	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:20	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:43	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:54	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:11	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	7470A		1	423309	03/13/18 12:31	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	03/13/18 13:48 (Start) 03/13/18 13:51 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B11 (5-10) Dup**

**Lab Sample ID: 500-141817-15**

**Date Collected: 03/06/18 13:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 15:37	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 13:10	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:20	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:05	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:39	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709	03/15/18 15:37 (Start) 03/15/18 15:38 (End)	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:25	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:47	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:12	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:32	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:51 (Start) 03/13/18 13:54 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B16 (0-5)**

**Lab Sample ID: 500-141817-16**

**Date Collected: 03/06/18 11:40**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 16:02	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 15:12	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:10	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:42	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709		EAT	TAL CHI
						(Start) 03/15/18 15:38 (End) 03/15/18 15:38		

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:29	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:51	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 19:59	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:13	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:34	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:54 (Start) 03/13/18 13:57 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B16 (5-8)**

**Lab Sample ID: 500-141817-17**

**Date Collected: 03/06/18 11:50**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 16:28	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 11:32	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:24	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:15	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:49	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709	03/15/18 15:38 (Start) 03/15/18 15:39 (End)	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:34	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:55	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:14	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:35	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423441	03/13/18 13:57 (Start) 03/13/18 14:01 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B17 (0-5)**

**Lab Sample ID: 500-141817-18**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 16:53	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 17:38	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:19	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:51	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709		EAT	TAL CHI
						(Start) 03/15/18 15:39 (End) 03/15/18 15:39		

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:39	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 21:59	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:17	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:37	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
						(Start) 03/13/18 14:01 (End) 03/13/18 14:04		
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (0-5) Dup**

**Lab Sample ID: 500-141817-19**

**Date Collected: 03/06/18 12:00**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 17:18	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 17:13	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:33	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:53	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709		EAT	TAL CHI
						(Start) 03/15/18 15:39		
						(End) 03/15/18 15:40		

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

**Date Collected: 03/06/18 12:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422893	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423171	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 01:53	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 22:04	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6010B		10	423594	03/14/18 20:04	PJ1	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423096	03/12/18 09:21	JEF	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 19:17	FXG	TAL CHI
TCLP	Leach	1311			422885	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423146	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 12:38	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
						(Start) 03/13/18 14:04		
						(End) 03/13/18 14:07		
Total/NA	Analysis	Moisture		1	422653	03/08/18 09:13	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

**Date Collected: 03/06/18 12:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B17 (5-8)**

**Lab Sample ID: 500-141817-20**

Date Collected: 03/06/18 12:10

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	423040	03/12/18 17:44	DJD	TAL CHI
Total/NA	Prep	3541			422635	03/08/18 07:14	NKG	TAL CHI
Total/NA	Analysis	8270D		1	422826	03/09/18 11:08	AJD	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423413	03/13/18 23:28	PJ1	TAL CHI
Total/NA	Prep	3050B			422763	03/08/18 17:14	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423236	03/13/18 02:38	PJ1	TAL CHI
Total/NA	Prep	7471B			422742	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 11:55	EEN	TAL CHI
Total/NA	Prep	9010B			423612	03/15/18 10:15	EAT	TAL CHI
Total/NA	Analysis	9014		1	423709		EAT	TAL CHI
						(Start) 03/15/18 15:40		
						(End) 03/15/18 15:40		

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

Date Collected: 03/06/18 12:20

Matrix: Solid

Date Received: 03/07/18 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422895	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423172	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 02:09	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 17:45	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6020A		1	423438	03/13/18 16:34	FXG	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423314	03/13/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423474	03/14/18 08:53	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
						(Start) 03/13/18 14:10		
						(End) 03/13/18 14:14		
Total/NA	Analysis	Moisture		1	422659	03/08/18 09:31	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

Date Collected: 03/06/18 12:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 18:09	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (0-5)**

**Lab Sample ID: 500-141817-21**

**Date Collected: 03/06/18 12:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	422679	03/08/18 15:05	GLR	TAL CHI
Total/NA	Prep	3050B			422764	03/08/18 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423068	03/09/18 17:33	PJ1	TAL CHI
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:21	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:33		
					(End)	03/09/18 15:33		

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

**Date Collected: 03/06/18 12:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422895	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423172	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 02:14	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 18:01	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6020A		1	423438	03/13/18 16:35	FXG	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423314	03/13/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423474	03/14/18 08:55	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441		SMO	TAL CHI
					(Start)	03/13/18 14:14		
					(End)	03/13/18 14:17		
Total/NA	Analysis	Moisture		1	422659	03/08/18 09:31	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

**Date Collected: 03/06/18 12:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 18:34	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	422679	03/08/18 15:30	GLR	TAL CHI
Total/NA	Prep	3050B			422764	03/08/18 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/12/18 23:45	PJ1	TAL CHI
Total/NA	Prep	3050B			422764	03/08/18 17:17	BDE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B18 (5-8)**

**Lab Sample ID: 500-141817-22**

**Date Collected: 03/06/18 12:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 81.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	423068	03/09/18 17:48	PJ1	TAL CHI
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:23	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929	(Start) 03/09/18 15:33 (End) 03/09/18 15:34	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422895	03/09/18 13:08	JLC	TAL CHI
SPLP East	Prep	3010A			423172	03/13/18 06:45	JEF	TAL CHI
SPLP East	Analysis	6010B		1	423428	03/14/18 02:18	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6010B		1	423413	03/13/18 18:06	PJ1	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6010B		10	423520	03/14/18 11:55	KML	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	3010A			423170	03/13/18 06:45	JEF	TAL CHI
TCLP	Analysis	6020A		1	423438	03/13/18 16:35	FXG	TAL CHI
TCLP	Leach	1311			422889	03/09/18 13:08	JLC	TAL CHI
TCLP	Prep	7470A			423314	03/13/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423474	03/14/18 08:56	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423441	(Start) 03/13/18 14:17 (End) 03/13/18 14:20	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	422659	03/08/18 09:31	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422667	03/07/18 16:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	423040	03/12/18 18:59	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	422679	03/08/18 15:54	GLR	TAL CHI
Total/NA	Prep	3050B			422764	03/08/18 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/12/18 23:49	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

**Client Sample ID: 2490V2-3-B11 (10-15)**

**Lab Sample ID: 500-141817-23**

**Date Collected: 03/06/18 13:10**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			422764	03/08/18 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423068	03/09/18 17:53	PJ1	TAL CHI
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:25	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:34		
					(End)	03/09/18 15:34		

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141817-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60  
Phone: 708.534.5200 Fax: 708.534.



500-141817 COC

Report To (optional)  
Contact: Matt Weiss  
Company: Terracon  
Address: \_\_\_\_\_  
Address: Naperville  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141817  
Chain of Custody Number: \_\_\_\_\_  
Page 1 of 3  
Temperature °C of Cooler: 2.6/3.1/2.9

Client		Client Project #		Preservative		Parameter		Total TAL		TCLPTAL		SPLP TAL		Preservative Key
<u>Terracon</u>		<u>11187007B</u>						<u>23 Inj</u>		<u>23 Inj</u>				
Project Name				Lab Project #		Matrix		PH				Comments		
<u>Work Order #45</u>						<u>VOCs</u>		<u>SVOCs</u>						
Project Location/State				Lab PM										
<u>Crystal Lake IL</u>				<u>Kym S Peterson</u>										
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix								
1		2490V2-3-B01(0-5)	3/6	1410	5	S	X	X	X	X	X	X		
2		2490V2-3-B02(0-5)	3/6	1350										
3		2490V2-3-B06(0-5)	3/6	1030										
4		2490V2-3-B06(0-5)DUP	3/6	1030										
5		2490V2-3-B06(5-10)	3/6	1040										
6		2490V2-3-B06(10-15)	3/6	1050										
7		2490V2-3-B07(0-5)	3/6	1000										
8		2490V2-3-B07(5-10)	3/6	1005										
9		2490V2-3-B07(10-15)	3/6	1010										
10		2490V2-3-B08(0-5)	3/6	935										



Turnaround Time Required (Business Days)

\_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days  10 Days \_\_\_ 15 Days \_\_\_ Other

Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/6/18</u> Time: <u>1600</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0830</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0830</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0923</u>	Received By: <u>[Signature]</u> Company: <u>TA-CH</u> Date: <u>3/7/18</u> Time: <u>0923</u>

Lab Courier: TA  
Shipped: \_\_\_\_\_  
Hand Delivered: \_\_\_\_\_

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments:  
\* No Al  
\* Hold SPLP

Lab Comments:

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
Contact: Matt Weiss  
Company: Terracon  
Address:  
Address: Naperville  
Phone:  
Fax:  
E-Mail:

Bill To (optional)  
Contact:  
Company:  
Address:  
Address:  
Phone:  
Fax:  
PO#/Reference#

## Chain of Custody Record

Lab Job #: 500-141817  
Chain of Custody Number:  
Page 2 of 3  
Temperature °C of Cooler:

Client		Client Project #		Preservative		Parameter		Matrix		Comments			
Terracon		11187007B											
Project Name		Work Order #45		Parameter									
Project Location/State		Lab Project #		Matrix									
Crystal Lake IL													
Sampler		Lab PM											
Ryan J Peterson													
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	Total TAC	PTI	TCLP TAC	SPLP TAC	Comments
			Date	Time									
11		2490V2-3-B09(0-5)	3/6	9:25	55		X	X	X	X	X	X	
12		2490V2-3-B10(0-5)	3/6	9:15			X	X	X	X	X	X	
13		2490V2-3-B11(0-5)	3/6	12:50			X	X	X	X	X	X	
14		2490V2-3-B11(5-10)	3/6	13:00			X	X	X	X	X	X	
15		2490V2-3-B11(5-10)DP	3/6	13:00			X	X	X	X	X	X	
16		2490V2-3-B16(0-5)	3/6	11:40			X	X	X	X	X	X	
17		2490V2-3-B16(5-8)	3/6	11:50			X	X	X	X	X	X	
18		2490V2-3-B17(0-5)	3/6	12:00			X	X	X	X	X	X	
19		2490V2-3-B17(0-5)DP	3/6	12:00			X	X	X	X	X	X	
20		2490V2-3-B17(5-8)	3/6	12:10			X	X	X	X	X	X	

- Preservative Key
- HCL, Cool to 4°
  - H2SO4, Cool to 4°
  - HNO3, Cool to 4°
  - NaOH, Cool to 4°
  - NaOH/Zn, Cool to 4°
  - NaHSO4
  - Cool to 4°
  - None
  - Other



Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days X 10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Due Date  
 Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company Terracon Date 3/6/18 Time 1600	Received By <u>[Signature]</u> Company JA Date 3/6/18 Time 1600
Relinquished By <u>[Signature]</u> Company JA Date 3/7/18 Time 0830	Received By <u>[Signature]</u> Company JA Date 3/7/18 Time 0830
Relinquished By <u>[Signature]</u> Company JA Date 3/7/18 Time 0923	Received By <u>[Signature]</u> Company JA-CRI Date 3/7/18 Time 0923

Lab Courier: TA  
Shipped:   
Hand Delivered:

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
\* No AL  
\* Hold SPLP

Lab Comments:



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Matt Weiss  
Contact: Terracon  
Company: Naperville  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141817  
Chain of Custody Number: \_\_\_\_\_  
Page 3 of 3  
Temperature °C of Cooler: \_\_\_\_\_

Client		Client Project #		Preservative		Parameter										Preservative Key	
<u>Terracon</u>		<u>1187007B</u>														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM									
<u>Work Order # 45</u>		<u>Crystal Lake IL</u>				<u>Ryan S Peterson</u>											
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOLs	SVOLs	Total TAL	23 Inorg	PH	TCLP TAL	23 Inorg	SPLP TAL	23 Inorg	Comments	
			Date	Time													
<u>21</u>		<u>2490V2-3-B18(0-5)</u>	<u>3/6</u>	<u>1220</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>22</u>		<u>2490V2-3-B18(5-8)</u>	<u>3/6</u>	<u>1230</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>23</u>		<u>2490V2-3 B11 (10-15)</u>	<u>3/6</u>	<u>1310</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		<u>Added by TA</u>



Turnaround Time Required (Business Days) \_\_\_\_\_  
 Requested Due Date \_\_\_\_\_  
 Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>2/7/18</u> Time: <u>0830</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/5/18</u> Time: <u>0830</u>	Shipped: _____
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0923</u>	Received By: <u>[Signature]</u> Company: <u>TA-CPE</u> Date: <u>3/7/18</u> Time: <u>0923</u>	Hand Delivered: _____

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments: \* No AL  
Hold SPLP

Lab Comments: \_\_\_\_\_

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141817-1

**Login Number: 141817**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6,3.1,2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141878-2

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/19/2018 2:05:50 PM

Richard Wright, Senior Project Manager

(708)534-5200

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Job ID: 500-141878-2**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141878-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 2:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422971: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B03 (0-5)**

**Lab Sample ID: 500-141878-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.0098	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.034	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.023	J	0.039	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.044		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.016	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.0087	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.0		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.85		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.046	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	22		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	29		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5600		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	5100	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	500		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	41		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.40	J	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	67		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	190		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	90		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.2	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B04 (0-5)**

**Lab Sample ID: 500-141878-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.012	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.31		0.19	0.068	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.014	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.023	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.013	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

## Client Sample ID: 2490V2-3-B04 (0-5) (Continued)

## Lab Sample ID: 500-141878-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.021	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.22	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6700		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	8200	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	570		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.84		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	2200		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	270		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.30	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.71	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B05 (0-5)

## Lab Sample ID: 500-141878-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.0072	J	0.037	0.0061	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.042		0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.065		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.10		0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.047		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.037		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.063		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.14		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.045		0.037	0.0095	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.061		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.082		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.4		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B05 (0-5) (Continued)**

**Lab Sample ID: 500-141878-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.3		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Calcium	76000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	400		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	22		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	2200		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.29	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	480		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	77		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.72	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141878-2	2490V2-3-B03 (0-5)	Solid	03/07/18 09:40	03/07/18 14:45
500-141878-3	2490V2-3-B04 (0-5)	Solid	03/07/18 09:55	03/07/18 14:45
500-141878-4	2490V2-3-B05 (0-5)	Solid	03/07/18 10:05	03/07/18 14:45

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B03 (0-5)**

**Lab Sample ID: 500-141878-2**

**Date Collected: 03/07/18 09:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 81.2**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/07/18 16:00	03/10/18 15:33	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/10/18 15:33	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	03/07/18 16:00	03/10/18 15:33	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 15:33	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Benzo[a]anthracene</b>	<b>0.0098</b>	<b>J</b>	0.039	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B03 (0-5)**

**Lab Sample ID: 500-141878-2**

**Date Collected: 03/07/18 09:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 81.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.034</b>	<b>J</b>	0.039	0.0077	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Benzo[b]fluoranthene</b>	<b>0.023</b>	<b>J</b>	0.039	0.0086	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Benzo[g,h,i]perylene</b>	<b>0.044</b>		0.039	0.013	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Chrysene</b>	<b>0.020</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.039	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.016</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B03 (0-5)**

**Lab Sample ID: 500-141878-2**

**Date Collected: 03/07/18 09:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 81.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Phenanthrene</b>	<b>0.0087</b>	<b>J</b>	0.039	0.0055	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Pyrene</b>	<b>0.018</b>	<b>J</b>	0.039	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 16:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	87		44 - 121				03/08/18 16:50	03/09/18 16:37	1
2-Fluorophenol	84		46 - 133				03/08/18 16:50	03/09/18 16:37	1
Nitrobenzene-d5	78		41 - 120				03/08/18 16:50	03/09/18 16:37	1
Phenol-d5	77		46 - 125				03/08/18 16:50	03/09/18 16:37	1
Terphenyl-d14	79		35 - 160				03/08/18 16:50	03/09/18 16:37	1
2,4,6-Tribromophenol	112		25 - 139				03/08/18 16:50	03/09/18 16:37	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Arsenic</b>	<b>7.0</b>		0.57	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Barium</b>	<b>61</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Beryllium</b>	<b>0.85</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Cadmium</b>	<b>0.046</b>	<b>J B</b>	0.11	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Chromium</b>	<b>22</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Cobalt</b>	<b>14</b>		0.29	0.075	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Copper</b>	<b>23</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Iron</b>	<b>23000</b>		11	5.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Lead</b>	<b>29</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Magnesium</b>	<b>5600</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Calcium</b>	<b>5100</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Manganese</b>	<b>500</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Nickel</b>	<b>41</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Selenium</b>	<b>0.40</b>	<b>J</b>	0.57	0.34	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Vanadium</b>	<b>25</b>		0.29	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Zinc</b>	<b>67</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Potassium</b>	<b>1900</b>		29	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1
<b>Sodium</b>	<b>1300</b>		57	8.5	mg/Kg	☼	03/08/18 17:17	03/09/18 17:05	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Barium</b>	<b>0.36</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Cadmium</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:55	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B03 (0-5)**

**Lab Sample ID: 500-141878-2**

**Date Collected: 03/07/18 09:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 81.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>190</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:55	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Magnesium</b>	<b>90</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Manganese</b>	<b>2.1</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Nickel</b>	<b>0.028</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
<b>Potassium</b>	<b>1.2 J</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:55	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:55	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:55	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:55	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>2.2</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:05	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:47	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:12	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.026</b>		0.020	0.0066	mg/Kg	☼	03/09/18 15:15	03/12/18 13:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	03/15/18 10:15	03/15/18 15:42	1
<b>pH</b>	<b>8.1</b>		0.20	0.20	SU			03/13/18 15:18	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B04 (0-5)**

**Lab Sample ID: 500-141878-3**

Date Collected: 03/07/18 09:55

Matrix: Solid

Date Received: 03/07/18 14:45

Percent Solids: 84.5

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/10/18 15:58	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 15:58	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	03/07/18 16:00	03/10/18 15:58	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 15:58	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
<b>Benzo[a]anthracene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B04 (0-5)**

**Lab Sample ID: 500-141878-3**

**Date Collected: 03/07/18 09:55**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.013	J	0.037	0.0072	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Benzo[b]fluoranthene	0.016	J	0.037	0.0081	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Benzo[g,h,i]perylene	0.013	J	0.037	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Bis(2-ethylhexyl) phthalate	0.31		0.19	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Chrysene	0.014	J	0.037	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Fluoranthene	0.023	J	0.037	0.0069	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Indeno[1,2,3-cd]pyrene	0.011	J	0.037	0.0097	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B04 (0-5)**

**Lab Sample ID: 500-141878-3**

**Date Collected: 03/07/18 09:55**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
<b>Phenanthrene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
<b>Pyrene</b>	<b>0.021</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	03/08/18 16:50	03/09/18 13:58	1
2-Fluorophenol	92		46 - 133	03/08/18 16:50	03/09/18 13:58	1
Nitrobenzene-d5	82		41 - 120	03/08/18 16:50	03/09/18 13:58	1
Phenol-d5	82		46 - 125	03/08/18 16:50	03/09/18 13:58	1
Terphenyl-d14	80		35 - 160	03/08/18 16:50	03/09/18 13:58	1
2,4,6-Tribromophenol	107		25 - 139	03/08/18 16:50	03/09/18 13:58	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Arsenic</b>	<b>6.0</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Barium</b>	<b>56</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Beryllium</b>	<b>0.64</b>		0.22	0.053	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Chromium</b>	<b>18</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Cobalt</b>	<b>13</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Copper</b>	<b>17</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Iron</b>	<b>19000</b>		11	5.8	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Lead</b>	<b>24</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Magnesium</b>	<b>6700</b>		5.6	2.8	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Calcium</b>	<b>8200</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Manganese</b>	<b>570</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Nickel</b>	<b>20</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Selenium</b>	<b>0.84</b>		0.56	0.33	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Vanadium</b>	<b>24</b>		0.28	0.066	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Zinc</b>	<b>50</b>		1.1	0.49	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Potassium</b>	<b>1400</b>		28	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1
<b>Sodium</b>	<b>2200</b>		56	8.3	mg/Kg	☼	03/08/18 17:17	03/09/18 17:10	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:59	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B04 (0-5)**

**Lab Sample ID: 500-141878-3**

**Date Collected: 03/07/18 09:55**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>270</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:59	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Iron</b>	<b>0.30</b>	<b>J</b>	0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Manganese</b>	<b>0.76</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
<b>Potassium</b>	<b>0.71</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:59	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:59	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:59	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:59	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:10	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:48	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:14	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.017	0.0058	mg/Kg	☼	03/09/18 15:15	03/12/18 13:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	03/15/18 10:15	03/15/18 15:42	1
<b>pH</b>	<b>8.2</b>		0.20	0.20	SU			03/13/18 15:21	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B05 (0-5)**

**Lab Sample ID: 500-141878-4**

**Date Collected: 03/07/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 86.8**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/10/18 16:24	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 16:24	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/07/18 16:00	03/10/18 16:24	1
Toluene-d8 (Surr)	98		75 - 124	03/07/18 16:00	03/10/18 16:24	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Acenaphthylene	<0.037		0.037	0.0048	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Anthracene</b>	<b>0.0072</b>	<b>J</b>	0.037	0.0061	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Benzo[a]anthracene</b>	<b>0.042</b>		0.037	0.0049	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B05 (0-5)**

**Lab Sample ID: 500-141878-4**

**Date Collected: 03/07/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 86.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.065</b>		0.037	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Benzo[b]fluoranthene</b>	<b>0.10</b>		0.037	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Benzo[g,h,i]perylene</b>	<b>0.047</b>		0.037	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Benzo[k]fluoranthene</b>	<b>0.037</b>		0.037	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Chrysene</b>	<b>0.063</b>		0.037	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Dibenz(a,h)anthracene</b>	<b>0.010 J</b>		0.037	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4-Dinitrophenol	<0.74 *		0.74	0.65	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Fluoranthene</b>	<b>0.14</b>		0.037	0.0068	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.045</b>		0.037	0.0095	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B05 (0-5)**

**Lab Sample ID: 500-141878-4**

**Date Collected: 03/07/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 86.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Phenanthrene</b>	<b>0.061</b>		0.037	0.0051	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
Phenol	<0.18		0.18	0.082	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
<b>Pyrene</b>	<b>0.082</b>		0.037	0.0073	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		44 - 121	03/08/18 16:50	03/09/18 16:11	1
2-Fluorophenol	86		46 - 133	03/08/18 16:50	03/09/18 16:11	1
Nitrobenzene-d5	84		41 - 120	03/08/18 16:50	03/09/18 16:11	1
Phenol-d5	81		46 - 125	03/08/18 16:50	03/09/18 16:11	1
Terphenyl-d14	75		35 - 160	03/08/18 16:50	03/09/18 16:11	1
2,4,6-Tribromophenol	99		25 - 139	03/08/18 16:50	03/09/18 16:11	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Arsenic</b>	<b>5.4</b>		0.53	0.18	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Barium</b>	<b>39</b>		0.53	0.061	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Beryllium</b>	<b>0.59</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Cadmium</b>	<b>0.15</b>	<b>B</b>	0.11	0.019	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Chromium</b>	<b>14</b>		0.53	0.26	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Cobalt</b>	<b>9.3</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Copper</b>	<b>19</b>		0.53	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Iron</b>	<b>16000</b>		11	5.5	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Lead</b>	<b>19</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Magnesium</b>	<b>28000</b>		5.3	2.6	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Calcium</b>	<b>76000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:17	03/12/18 23:41	10
<b>Manganese</b>	<b>400</b>		0.53	0.077	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Nickel</b>	<b>22</b>		0.53	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Selenium</b>	<b>0.68</b>		0.53	0.31	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Vanadium</b>	<b>20</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Zinc</b>	<b>48</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Potassium</b>	<b>1600</b>		27	9.4	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1
<b>Sodium</b>	<b>2200</b>		53	7.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:14	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
<b>Barium</b>	<b>0.29</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 19:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 19:03	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 19:03	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

**Client Sample ID: 2490V2-3-B05 (0-5)**

**Lab Sample ID: 500-141878-4**

**Date Collected: 03/07/18 10:05**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 86.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>480</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 19:03	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 19:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 19:03	1
<b>Magnesium</b>	<b>77</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:03	1
<b>Manganese</b>	<b>0.22</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
<b>Potassium</b>	<b>0.72 J</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:03	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 19:03	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:03	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 19:03	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.5</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:14	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:49	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:15	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015 J</b>		0.018	0.0059	mg/Kg	☼	03/09/18 15:15	03/12/18 13:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.19	mg/Kg	☼	03/15/18 10:15	03/15/18 15:44	1
<b>pH</b>	<b>8.5</b>		0.20	0.20	SU			03/13/18 15:24	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-2

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Matt Weiss  
 Contact: Terracon  
 Company: Terracon  
 Address: 135 Ambassador Dr  
 Address: Naperville IL  
 Phone: 630-445-0160  
 Fax:  
 E-Mail: matt.weiss@terracon.com

Bill To (optional)  
 Contact:  
 Company:  
 Address:  
 Address:  
 Phone:  
 Fax:  
 #/Reference#

## Chain of Custody Record

Lab Job #: 500-141878  
 Chain of Custody Number:  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: 4.9

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
<u>Terracon</u>		<u>11182007B</u>								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix		Comments	
<u>Work Order #45</u>				Date Time		Matrix					
Project Location/State		Lab PM		Sample ID		Date		Time		Matrix	
<u>Crystal Lake IL</u>				<u>2490VZ-3-803(O-S)</u>		<u>3/7</u>		<u>940</u>		<u>S</u>	
Sampler		Lab PM		Sample ID		Date		Time		Matrix	
<u>Ryan J Peterson</u>				<u>2490VZ-3-804(O-S)</u>		<u>3/7</u>		<u>955</u>		<u>S</u>	
				<u>2490VZ-3-805(O-S)</u>		<u>3/7</u>		<u>1005</u>		<u>S</u>	
2	MS/MSD										
3											
4											

Turnaround Time Required (Business Days)

\_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days  10 Days \_\_\_ 15 Days \_\_\_ Other

Requested Due Date

Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/7/18</u> Time: <u>1340</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>1340</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>1445</u>	Received By: <u>[Signature]</u> Company: <u>TA-CHE</u> Date: <u>3/7/18</u> Time: <u>1445</u>

Lab Courier: TA  
 Shipped:   
 Hand Delivered:

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
\* No AL  
\* Hold SPLP

Lab Comments:



# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141878-2

**Login Number: 141878**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141780-1

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/14/2018 4:55:19 PM

Richard Wright, Senior Project Manager

(708)534-5200

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)



### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Job ID: 500-141780-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141780-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/6/2018 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.3° C, 3.1° C and 4.3° C. The sample ID for lab sample 3 was modified per communication with Terracon on 3/7/18.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS/LCSD associated with 422818 and 422684: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Surrogate recovery for the following sample was outside the upper control limit: (MB 500-422624/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: Surrogate recovery for the following samples was outside the upper control limit: 2490V2-3-B13 (0-5) (500-141780-4) and 2490V2-3-B30 (5-10) (500-141780-21). This samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-141780-E-1-B MS) and (500-141780-E-1-C MSD)

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-141780-E-21-B MS) and (500-141780-E-21-C MS)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.017	0.0073	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.023	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.042	F1	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.023	J F1	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.046	F1	0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.016	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.023	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.042		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.3	F1	0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.058	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	52	F2	0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B F2	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	62000	B F2	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	440		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J F1	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1800	F1 F2	28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1900	B F1	56	8.4	mg/Kg	1	☼	6010B	Total/NA
Barium	0.44	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	560		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.29	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	36		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.079		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.9	J B	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.024		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.015	0.0066	mg/Kg	1	☼	8260B	Total/NA
Chrysene	0.013	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.019	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.0		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B12 (5-10) (Continued)

## Lab Sample ID: 500-141780-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.4		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	36000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	94000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	370		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	330	B	54	8.0	mg/Kg	1	☼	6010B	Total/NA
Barium	0.21	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	840		50	5.0	mg/L	10		6010B	TCLP
Iron	0.32	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	41		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	3.1	B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.024	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B12 (10-15)

## Lab Sample ID: 500-141780-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.016		0.014	0.0061	mg/Kg	1	☼	8260B	Total/NA
Carbon tetrachloride	0.00072	J	0.0014	0.00041	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.0082	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.021	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.014	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.0093	J	0.075	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.024	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.015	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	23		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	37000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	330		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	28		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B12 (10-15) (Continued)

## Lab Sample ID: 500-141780-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	16		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	210	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	730		50	5.0	mg/L	10		6010B	TCLP
Cobalt	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	31		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.058	B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.9	B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.058	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.063		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B13 (0-5)

## Lab Sample ID: 500-141780-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.024		0.015	0.0066	mg/Kg	1	☼	8260B	Total/NA
Acenaphthene	0.011	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0086	J	0.036	0.0047	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.052		0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.32		0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.43		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.74		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.23		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.27		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.43		0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.043		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.89		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.21		0.036	0.0093	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.27		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.53		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.4		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	27		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.30		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	44		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	48000	B	5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Calcium	120000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.52	0.30	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B13 (0-5) (Continued)

## Lab Sample ID: 500-141780-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	15		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Potassium	880		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	780	B	52	7.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0033	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	430		5.0	0.50	mg/L	1		6010B	TCLP
Lead	0.013		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	91		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	3.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.017	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.6	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.036	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.22		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B14 (0-5)

## Lab Sample ID: 500-141780-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.010	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.018	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.025	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.014	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.011	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.016	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.22	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.3		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	33000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.62		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B14 (0-5) (Continued)

## Lab Sample ID: 500-141780-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	410		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.32	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.77		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B15 (0-5)

## Lab Sample ID: 500-141780-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.0083	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.024	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.12		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.25		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.094		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.089		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.16		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.40		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.011	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.087		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.22		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.33	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.9		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.3		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	91000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100	B	55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.23	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	510		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	69		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.54		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J B	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B15 (0-5) (Continued)

## Lab Sample ID: 500-141780-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.5	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B19 (0-5)

## Lab Sample ID: 500-141780-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.9		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3200	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	2600	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	29		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	48	J B	56	8.4	mg/Kg	1	☼	6010B	Total/NA
Barium	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	57		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.66		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	23		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.95	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.035	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.034		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B20 (0-5)

## Lab Sample ID: 500-141780-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.6		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9700	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B20 (0-5) (Continued)

## Lab Sample ID: 500-141780-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.45	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	57	J B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	220		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.088		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.014	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J B	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.026		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.2		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B21 (0-5)

## Lab Sample ID: 500-141780-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.43		0.21	0.075	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	89		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.053	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.1		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	9.7		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2500	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	2700	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	78		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	710		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Sodium	45	J B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Barium	0.25	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	54		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.54		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	21		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.76	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.072	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.1		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B22 (0-5)

## Lab Sample ID: 500-141780-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B22 (0-5) (Continued)

## Lab Sample ID: 500-141780-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.88		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Chromium	23		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	25000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9900	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	9500	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	41		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	28		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	67		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	340	B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	230		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.27	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.038		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B23 (0-5)

## Lab Sample ID: 500-141780-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.035	J	0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.046		0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.060		0.041	0.0088	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.034	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.029	J	0.041	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.046		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.010	J	0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.085		0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.031	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.023	J	0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.050		0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B23 (0-5) (Continued)

## Lab Sample ID: 500-141780-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	13000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.56	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	670	B	59	8.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	250		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.31	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	6.2	B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.036	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.1		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B24 (0-5)

## Lab Sample ID: 500-141780-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.1		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	91000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	400		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	110	B	54	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	850		50	5.0	mg/L	10		6010B	TCLP
Magnesium	30		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.086		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J B	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.014	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B24 (0-5) Dup

## Lab Sample ID: 500-141780-13

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B24 (0-5) Dup (Continued)

## Lab Sample ID: 500-141780-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.013	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.010	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.011	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.011	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.024	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.018	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.2		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000	B	5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Calcium	130000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	400		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	28		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	130	B	53	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	840		50	5.0	mg/L	10		6010B	TCLP
Magnesium	30		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B25 (0-5)

## Lab Sample ID: 500-141780-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	76		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3100	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	2300	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	34		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B25 (0-5) (Continued)

## Lab Sample ID: 500-141780-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	860		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	36	J B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	89		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	42		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.77	J B	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.043		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	6.9		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B26 (0-5)

## Lab Sample ID: 500-141780-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.8		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	74000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2400		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	130	B	54	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.31	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	500		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.068		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.98	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.032	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.016	J	0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B27 (0-5)

## Lab Sample ID: 500-141780-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	54		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	8.6		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B27 (0-5) (Continued)

## Lab Sample ID: 500-141780-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	9100	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	490		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.79		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	40		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	530	B	57	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	380		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	2.6	B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B28 (0-5)

## Lab Sample ID: 500-141780-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.9		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.54	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	38000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	350		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.36	J	0.54	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	480	B	54	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	0.31	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	460		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.33	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.2	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.063	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.014	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.4		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.4		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7900	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	10000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	27		0.29	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	840		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	62	B	59	8.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	300		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	170		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.017	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.78	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.63		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.043		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.2		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.21	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	28		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	320		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.56		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Sodium	130	B	55	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.26	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	830		50	5.0	mg/L	10		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B29 (5-10) (Continued)

## Lab Sample ID: 500-141780-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	46		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.9	J B	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.59		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B30 (0-5)

## Lab Sample ID: 500-141780-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.6		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	71		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.93		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Chromium	21		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	21		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4100	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Calcium	2100	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	600		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.62		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	70		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		31	11	mg/Kg	1	☼	6010B	Total/NA
Sodium	800	B	61	9.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.21	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	58		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.36	J F1	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	19		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.010	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J B	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.024	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.037		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B30 (5-10)

## Lab Sample ID: 500-141780-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.0011	J	0.0015	0.00044	mg/Kg	1	☼	8260B	Total/NA
Antimony	0.20	J B F1	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.2		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10) (Continued)**

**Lab Sample ID: 500-141780-21**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	19		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	34000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Calcium	100000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	350		0.52	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	470		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	1000		50	5.0	mg/L	10		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	43		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.99		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.4	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.034	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.62		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.26	J	0.45	0.16	mg/Kg	1	☼	9014	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	11		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	25000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Manganese	500		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	81		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	92		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	390		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	220		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.8	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.63		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Client Sample ID: 2490V2-3-B31 (0-5) (Continued)

## Lab Sample ID: 500-141780-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.0		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-3-B31 (5-10)

## Lab Sample ID: 500-141780-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.023	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.5		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.6		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	130000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Manganese	300		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.42	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	990		50	5.0	mg/L	10		6010B	TCLP
Magnesium	50		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.6	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.47		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141780-1	2490V2-3-B12 (0-5)	Solid	03/05/18 13:40	03/06/18 13:09
500-141780-2	2490V2-3-B12 (5-10)	Solid	03/05/18 13:50	03/06/18 13:09
500-141780-3	2490V2-3-B12 (10-15)	Solid	03/05/18 14:00	03/06/18 13:09
500-141780-4	2490V2-3-B13 (0-5)	Solid	03/05/18 14:20	03/06/18 13:09
500-141780-5	2490V2-3-B14 (0-5)	Solid	03/05/18 14:35	03/06/18 13:09
500-141780-6	2490V2-3-B15 (0-5)	Solid	03/05/18 14:45	03/06/18 13:09
500-141780-7	2490V2-3-B19 (0-5)	Solid	03/05/18 09:40	03/06/18 13:09
500-141780-8	2490V2-3-B20 (0-5)	Solid	03/05/18 11:10	03/06/18 13:09
500-141780-9	2490V2-3-B21 (0-5)	Solid	03/05/18 11:40	03/06/18 13:09
500-141780-10	2490V2-3-B22 (0-5)	Solid	03/05/18 12:40	03/06/18 13:09
500-141780-11	2490V2-3-B23 (0-5)	Solid	03/05/18 13:00	03/06/18 13:09
500-141780-12	2490V2-3-B24 (0-5)	Solid	03/05/18 09:55	03/06/18 13:09
500-141780-13	2490V2-3-B24 (0-5) Dup	Solid	03/05/18 09:55	03/06/18 13:09
500-141780-14	2490V2-3-B25 (0-5)	Solid	03/05/18 11:00	03/06/18 13:09
500-141780-15	2490V2-3-B26 (0-5)	Solid	03/05/18 11:30	03/06/18 13:09
500-141780-16	2490V2-3-B27 (0-5)	Solid	03/05/18 12:30	03/06/18 13:09
500-141780-17	2490V2-3-B28 (0-5)	Solid	03/05/18 12:50	03/06/18 13:09
500-141780-18	2490V2-3-B29 (0-5)	Solid	03/05/18 10:40	03/06/18 13:09
500-141780-19	2490V2-3-B29 (5-10)	Solid	03/05/18 10:50	03/06/18 13:09
500-141780-20	2490V2-3-B30 (0-5)	Solid	03/05/18 12:05	03/06/18 13:09
500-141780-21	2490V2-3-B30 (5-10)	Solid	03/05/18 12:15	03/06/18 13:09
500-141780-22	2490V2-3-B31 (0-5)	Solid	03/05/18 10:20	03/06/18 13:09
500-141780-23	2490V2-3-B31 (5-10)	Solid	03/05/18 10:30	03/06/18 13:09

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

Date Collected: 03/05/18 13:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.013</b>	<b>J</b>	0.017	0.0073	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/06/18 18:00	03/08/18 16:28	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/08/18 16:28	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/08/18 16:28	1
Toluene-d8 (Surr)	97		75 - 124	03/06/18 18:00	03/08/18 16:28	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Benzo[a]anthracene</b>	<b>0.023</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

**Date Collected: 03/05/18 13:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.1**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.026</b>	<b>J</b>	0.037	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Benzo[b]fluoranthene</b>	<b>0.042</b>	<b>F1</b>	0.037	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Benzo[g,h,i]perylene</b>	<b>0.023</b>	<b>J F1</b>	0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Chrysene</b>	<b>0.031</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4,6-Dinitro-2-methylphenol	<0.74	F1	0.74	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4-Dinitrophenol	<0.74	F1	0.74	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Di-n-octyl phthalate	<0.19	F1	0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Fluoranthene</b>	<b>0.046</b>	<b>F1</b>	0.037	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.016</b>	<b>J</b>	0.037	0.0096	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

**Date Collected: 03/05/18 13:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.1**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.74	F1	0.74	0.35	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Phenanthrene</b>	<b>0.023</b>	<b>J</b>	0.037	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Pyrene</b>	<b>0.042</b>		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 23:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	98		44 - 121				03/08/18 06:47	03/08/18 23:53	1
2-Fluorophenol	93		46 - 133				03/08/18 06:47	03/08/18 23:53	1
Nitrobenzene-d5	88		41 - 120				03/08/18 06:47	03/08/18 23:53	1
Phenol-d5	94		46 - 125				03/08/18 06:47	03/08/18 23:53	1
Terphenyl-d14	81		35 - 160				03/08/18 06:47	03/08/18 23:53	1
2,4,6-Tribromophenol	118		25 - 139				03/08/18 06:47	03/08/18 23:53	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Arsenic</b>	<b>6.3</b>	<b>F1</b>	0.56	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Barium</b>	<b>53</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Beryllium</b>	<b>0.59</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Cadmium</b>	<b>0.058</b>	<b>J B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Cobalt</b>	<b>12</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Copper</b>	<b>22</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Iron</b>	<b>17000</b>		11	5.9	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Lead</b>	<b>52</b>	<b>F2</b>	0.28	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Magnesium</b>	<b>22000</b>	<b>B F2</b>	5.6	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Calcium</b>	<b>62000</b>	<b>B F2</b>	110	19	mg/Kg	☼	03/08/18 17:11	03/12/18 23:53	10
<b>Manganese</b>	<b>440</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Nickel</b>	<b>26</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Selenium</b>	<b>0.52</b>	<b>J F1</b>	0.56	0.33	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
Thallium	<0.56	F1	0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Vanadium</b>	<b>21</b>		0.28	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Zinc</b>	<b>64</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Potassium</b>	<b>1800</b>	<b>F1 F2</b>	28	10	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1
<b>Sodium</b>	<b>1900</b>	<b>B F1</b>	56	8.4	mg/Kg	☼	03/08/18 17:11	03/10/18 04:55	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Barium</b>	<b>0.44</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:22	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

**Date Collected: 03/05/18 13:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.1**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>560</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:22	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Iron</b>	<b>0.29</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Magnesium</b>	<b>36</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Manganese</b>	<b>0.079</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Nickel</b>	<b>0.013</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
<b>Potassium</b>	<b>1.9</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:22	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:22	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:22	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:22	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:56	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:27	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.019	0.0064	mg/Kg	☼	03/08/18 13:31	03/09/18 09:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	03/08/18 11:07	03/08/18 15:58	1
<b>pH</b>	<b>8.6</b>		0.20	0.20	SU			03/12/18 17:46	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.011	J	0.015	0.0066	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/06/18 18:00	03/08/18 16:53	1
Dibromofluoromethane	91		75 - 126	03/06/18 18:00	03/08/18 16:53	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/08/18 16:53	1
Toluene-d8 (Surr)	100		75 - 124	03/06/18 18:00	03/08/18 16:53	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.038	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
<b>Phenanthrene</b>	<b>0.019</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	03/08/18 06:47	03/08/18 16:21	1
2-Fluorophenol	89		46 - 133	03/08/18 06:47	03/08/18 16:21	1
Nitrobenzene-d5	84		41 - 120	03/08/18 06:47	03/08/18 16:21	1
Phenol-d5	90		46 - 125	03/08/18 06:47	03/08/18 16:21	1
Terphenyl-d14	76		35 - 160	03/08/18 06:47	03/08/18 16:21	1
2,4,6-Tribromophenol	114		25 - 139	03/08/18 06:47	03/08/18 16:21	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.36</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Arsenic</b>	<b>5.0</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Barium</b>	<b>28</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Beryllium</b>	<b>0.54</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Chromium</b>	<b>15</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Cobalt</b>	<b>9.4</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Copper</b>	<b>20</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Iron</b>	<b>16000</b>		11	5.6	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Magnesium</b>	<b>36000</b>	<b>B</b>	5.4	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Calcium</b>	<b>94000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:21	10
<b>Manganese</b>	<b>370</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Nickel</b>	<b>27</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Vanadium</b>	<b>17</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Zinc</b>	<b>48</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Potassium</b>	<b>2500</b>		27	9.5	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1
<b>Sodium</b>	<b>330</b>	<b>B</b>	54	8.0	mg/Kg	☼	03/08/18 17:11	03/10/18 05:16	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Barium</b>	<b>0.21</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:35	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>840</b>		50	5.0	mg/L		03/09/18 14:58	03/13/18 13:50	10
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Iron</b>	<b>0.32</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Magnesium</b>	<b>41</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Nickel</b>	<b>0.013</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Potassium</b>	<b>3.1</b>	<b>B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:35	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:35	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:35	1
<b>Zinc</b>	<b>0.024</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:35	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:05	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:57	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:28	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.017	0.0057	mg/Kg	☼	03/08/18 13:31	03/09/18 09:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	03/08/18 11:07	03/08/18 15:59	1
<b>pH</b>	<b>7.6</b>		0.20	0.20	SU			03/12/18 17:50	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

Date Collected: 03/05/18 14:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 88.9

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.016</b>		0.014	0.0061	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Carbon disulfide	<0.0035		0.0035	0.00073	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
<b>Carbon tetrachloride</b>	<b>0.00072</b>	<b>J</b>	0.0014	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Chloroethane	<0.0035	*	0.0035	0.0010	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,3-Dichloropropane, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Vinyl acetate	<0.0035		0.0035	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Vinyl chloride	<0.0014		0.0014	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/06/18 18:00	03/08/18 17:18	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/08/18 17:18	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/08/18 17:18	1
Toluene-d8 (Surr)	102		75 - 124	03/06/18 18:00	03/08/18 17:18	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Benzo[a]anthracene</b>	<b>0.0082</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

**Date Collected: 03/05/18 14:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Benzo[g,h,i]perylene</b>	<b>0.021</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Chrysene</b>	<b>0.021</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>2-Methylnaphthalene</b>	<b>0.0093</b>	<b>J</b>	0.075	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

Date Collected: 03/05/18 14:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 88.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Phenanthrene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Pyrene</b>	<b>0.015</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 16:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	96		44 - 121				03/08/18 06:47	03/08/18 16:47	1
2-Fluorophenol	95		46 - 133				03/08/18 06:47	03/08/18 16:47	1
Nitrobenzene-d5	88		41 - 120				03/08/18 06:47	03/08/18 16:47	1
Phenol-d5	87		46 - 125				03/08/18 06:47	03/08/18 16:47	1
Terphenyl-d14	81		35 - 160				03/08/18 06:47	03/08/18 16:47	1
2,4,6-Tribromophenol	92		25 - 139				03/08/18 06:47	03/08/18 16:47	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.28</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Arsenic</b>	<b>6.8</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Barium</b>	<b>23</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Beryllium</b>	<b>0.53</b>		0.22	0.052	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Chromium</b>	<b>14</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Cobalt</b>	<b>12</b>		0.28	0.073	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Copper</b>	<b>22</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Iron</b>	<b>16000</b>		11	5.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Lead</b>	<b>13</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Magnesium</b>	<b>37000</b>	<b>B</b>	5.6	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:11	03/13/18 00:25	10
<b>Manganese</b>	<b>330</b>		0.56	0.081	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Nickel</b>	<b>28</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Selenium</b>	<b>0.68</b>		0.56	0.33	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Vanadium</b>	<b>16</b>		0.28	0.066	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Zinc</b>	<b>53</b>		1.1	0.49	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Potassium</b>	<b>2500</b>		28	9.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1
<b>Sodium</b>	<b>210</b>	<b>B</b>	56	8.3	mg/Kg	☼	03/08/18 17:11	03/10/18 05:20	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Barium</b>	<b>0.34</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:39	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

**Date Collected: 03/05/18 14:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>730</b>		50	5.0	mg/L		03/09/18 14:58	03/13/18 13:55	10
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Cobalt</b>	<b>0.021</b>	<b>J</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Magnesium</b>	<b>31</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Manganese</b>	<b>1.8</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Nickel</b>	<b>0.058</b>	<b>B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Potassium</b>	<b>4.9</b>	<b>B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:39	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:39	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:39	1
<b>Zinc</b>	<b>0.058</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:39	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.063</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:10	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:57	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:34	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	0.019	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 09:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	03/08/18 11:07	03/08/18 15:59	1
<b>pH</b>	<b>7.6</b>		0.20	0.20	SU			03/12/18 17:52	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

Date Collected: 03/05/18 14:20

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 89.6

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.024		0.015	0.0066	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/06/18 18:00	03/08/18 17:44	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/08/18 17:44	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/08/18 17:44	1
Toluene-d8 (Surr)	97		75 - 124	03/06/18 18:00	03/08/18 17:44	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.011	J	0.036	0.0065	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Acenaphthylene	0.0086	J	0.036	0.0047	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Anthracene	0.052		0.036	0.0060	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Benzo[a]anthracene	0.32		0.036	0.0048	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

**Date Collected: 03/05/18 14:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 89.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.43</b>		0.036	0.0070	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Benzo[b]fluoranthene</b>	<b>0.74</b>		0.036	0.0078	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Benzo[g,h,i]perylene</b>	<b>0.23</b>		0.036	0.012	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Benzo[k]fluoranthene</b>	<b>0.27</b>		0.036	0.011	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Chrysene</b>	<b>0.43</b>		0.036	0.0098	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Dibenz(a,h)anthracene</b>	<b>0.043</b>		0.036	0.0070	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4-Dinitrophenol	<0.73		0.73	0.63	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Fluoranthene</b>	<b>0.89</b>		0.036	0.0067	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Fluorene</b>	<b>0.013 J</b>		0.036	0.0051	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Hexachlorobenzene	<0.073		0.073	0.0083	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.21</b>		0.036	0.0093	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

Date Collected: 03/05/18 14:20

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 89.6

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Phenanthrene</b>	<b>0.27</b>		0.036	0.0050	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
<b>Pyrene</b>	<b>0.53</b>		0.036	0.0072	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	03/08/18 06:47	03/09/18 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	103		44 - 121	03/08/18 06:47	03/09/18 00:46	1
2-Fluorophenol	106		46 - 133	03/08/18 06:47	03/09/18 00:46	1
Nitrobenzene-d5	93		41 - 120	03/08/18 06:47	03/09/18 00:46	1
Phenol-d5	102		46 - 125	03/08/18 06:47	03/09/18 00:46	1
Terphenyl-d14	88		35 - 160	03/08/18 06:47	03/09/18 00:46	1
2,4,6-Tribromophenol	146	X	25 - 139	03/08/18 06:47	03/09/18 00:46	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.35</b>	<b>J</b>	1.0	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Arsenic</b>	<b>4.4</b>		0.52	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Barium</b>	<b>27</b>		0.52	0.059	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Beryllium</b>	<b>0.30</b>		0.21	0.048	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.10	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Chromium</b>	<b>12</b>		0.52	0.26	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Cobalt</b>	<b>5.8</b>		0.26	0.068	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Copper</b>	<b>17</b>		0.52	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Iron</b>	<b>11000</b>		10	5.4	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Lead</b>	<b>44</b>		0.26	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Magnesium</b>	<b>48000</b>	<b>B</b>	5.2	2.6	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Calcium</b>	<b>120000</b>	<b>B</b>	100	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:29	10
<b>Manganese</b>	<b>320</b>		0.52	0.075	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Nickel</b>	<b>14</b>		0.52	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Selenium</b>	<b>0.37</b>	<b>J</b>	0.52	0.30	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Vanadium</b>	<b>15</b>		0.26	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Zinc</b>	<b>49</b>		1.0	0.45	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Potassium</b>	<b>880</b>		26	9.2	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1
<b>Sodium</b>	<b>780</b>	<b>B</b>	52	7.7	mg/Kg	☼	03/08/18 17:11	03/10/18 05:24	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Barium</b>	<b>0.36</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Cadmium</b>	<b>0.0033</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:43	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

**Date Collected: 03/05/18 14:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 89.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>430</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:43	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Lead</b>	<b>0.013</b>		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Magnesium</b>	<b>91</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Manganese</b>	<b>3.0</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Nickel</b>	<b>0.017</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Potassium</b>	<b>1.6</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:43	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:43	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:43	1
<b>Zinc</b>	<b>0.036</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:43	1

**Method: 6010B - SPLP Metals - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Lead</b>	<b>0.22</b>		0.0075	0.0075	mg/L		03/09/18 15:00	03/12/18 18:24	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:24	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:58	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:35	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015</b>	<b>J</b>	0.018	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 09:10	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/08/18 11:07	03/08/18 16:00	1
<b>pH</b>	<b>8.4</b>		0.20	0.20	SU			03/12/18 17:54	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

Date Collected: 03/05/18 14:35

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 84.6

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/06/18 18:00	03/08/18 18:09	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/08/18 18:09	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/06/18 18:00	03/08/18 18:09	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/08/18 18:09	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Benzo[a]anthracene</b>	<b>0.010</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 84.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.039	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Benzo[b]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.039	0.0084	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Benzo[g,h,i]perylene</b>	<b>0.014</b>	<b>J</b>	0.039	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.039	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Fluoranthene</b>	<b>0.025</b>	<b>J</b>	0.039	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.014</b>	<b>J</b>	0.039	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 84.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Phenanthrene</b>	<b>0.011</b>	<b>J</b>	0.039	0.0054	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Pyrene</b>	<b>0.016</b>	<b>J</b>	0.039	0.0077	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4,5-Trichlorophenol	<0.39		0.39	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 17:14	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	95		44 - 121				03/08/18 06:47	03/08/18 17:14	1
2-Fluorophenol	91		46 - 133				03/08/18 06:47	03/08/18 17:14	1
Nitrobenzene-d5	89		41 - 120				03/08/18 06:47	03/08/18 17:14	1
Phenol-d5	92		46 - 125				03/08/18 06:47	03/08/18 17:14	1
Terphenyl-d14	84		35 - 160				03/08/18 06:47	03/08/18 17:14	1
2,4,6-Tribromophenol	122		25 - 139				03/08/18 06:47	03/08/18 17:14	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.22</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Arsenic</b>	<b>5.6</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Barium</b>	<b>39</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Beryllium</b>	<b>0.52</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Chromium</b>	<b>14</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Cobalt</b>	<b>9.3</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Copper</b>	<b>20</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Iron</b>	<b>16000</b>		11	5.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Lead</b>	<b>17</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Magnesium</b>	<b>21000</b>	<b>B</b>	5.6	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Calcium</b>	<b>33000</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Manganese</b>	<b>370</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Nickel</b>	<b>23</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Selenium</b>	<b>0.62</b>		0.56	0.33	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Vanadium</b>	<b>21</b>		0.28	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Zinc</b>	<b>49</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Potassium</b>	<b>1300</b>		28	10	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1
<b>Sodium</b>	<b>1400</b>	<b>B</b>	56	8.3	mg/Kg	☼	03/08/18 17:11	03/10/18 05:28	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Barium</b>	<b>0.27</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Cadmium</b>	<b>0.0021</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:47	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 84.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>410</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:47	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Iron</b>	<b>0.32</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Manganese</b>	<b>0.21</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Nickel</b>	<b>0.010</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
<b>Potassium</b>	<b>1.3</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:47	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:47	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:47	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:47	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.77</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:29	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:59	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:40	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.017	0.0058	mg/Kg	☼	03/08/18 13:31	03/09/18 09:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/08/18 11:07	03/08/18 16:00	1
<b>pH</b>	<b>8.4</b>		0.20	0.20	SU			03/12/18 17:57	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

Date Collected: 03/05/18 14:45

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 88.4

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/06/18 18:00	03/08/18 18:35	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/08/18 18:35	1
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	03/06/18 18:00	03/08/18 18:35	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/08/18 18:35	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0083	J	0.037	0.0067	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Anthracene	0.024	J	0.037	0.0062	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Benzo[a]anthracene	0.12		0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.16		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Benzo[b]fluoranthene	0.25		0.037	0.0080	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Benzo[g,h,i]perylene	0.094		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Benzo[k]fluoranthene	0.089		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Chrysene	0.16		0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Fluoranthene	0.40		0.037	0.0069	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Fluorene	0.011 J		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Indeno[1,2,3-cd]pyrene	0.087		0.037	0.0096	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
<b>Phenanthrene</b>	<b>0.18</b>		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
<b>Pyrene</b>	<b>0.22</b>		0.037	0.0074	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/09/18 00:19	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	104		44 - 121				03/08/18 06:47	03/09/18 00:19	1
2-Fluorophenol	94		46 - 133				03/08/18 06:47	03/09/18 00:19	1
Nitrobenzene-d5	87		41 - 120				03/08/18 06:47	03/09/18 00:19	1
Phenol-d5	96		46 - 125				03/08/18 06:47	03/09/18 00:19	1
Terphenyl-d14	82		35 - 160				03/08/18 06:47	03/09/18 00:19	1
2,4,6-Tribromophenol	126		25 - 139				03/08/18 06:47	03/09/18 00:19	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.33</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Arsenic</b>	<b>5.9</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Barium</b>	<b>33</b>		0.55	0.062	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Beryllium</b>	<b>0.53</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Chromium</b>	<b>15</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Cobalt</b>	<b>9.3</b>		0.27	0.071	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Copper</b>	<b>18</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Iron</b>	<b>16000</b>		11	5.7	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Lead</b>	<b>12</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Magnesium</b>	<b>33000</b>	<b>B</b>	5.5	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Calcium</b>	<b>91000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:33	10
<b>Manganese</b>	<b>320</b>		0.55	0.079	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Nickel</b>	<b>23</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Selenium</b>	<b>0.59</b>		0.55	0.32	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Vanadium</b>	<b>21</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Zinc</b>	<b>47</b>		1.1	0.48	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Potassium</b>	<b>2000</b>		27	9.6	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1
<b>Sodium</b>	<b>1100</b>	<b>B</b>	55	8.1	mg/Kg	☼	03/08/18 17:11	03/10/18 05:32	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Barium</b>	<b>0.23</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>510</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:51	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Magnesium</b>	<b>69</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Manganese</b>	<b>0.54</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Nickel</b>	<b>0.011</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
<b>Potassium</b>	<b>1.5</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:51	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:51	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:51	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:51	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:33	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:00	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:42	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.019	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 09:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.16	mg/Kg	☼	03/08/18 11:07	03/08/18 16:00	1
<b>pH</b>	<b>8.8</b>		0.20	0.20	SU			03/12/18 17:59	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

Date Collected: 03/05/18 09:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 81.5

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/06/18 18:00	03/08/18 19:00	1
Dibromofluoromethane	91		75 - 126	03/06/18 18:00	03/08/18 19:00	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/06/18 18:00	03/08/18 19:00	1
Toluene-d8 (Surr)	100		75 - 124	03/06/18 18:00	03/08/18 19:00	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		44 - 121	03/08/18 06:47	03/08/18 17:41	1
2-Fluorophenol	101		46 - 133	03/08/18 06:47	03/08/18 17:41	1
Nitrobenzene-d5	91		41 - 120	03/08/18 06:47	03/08/18 17:41	1
Phenol-d5	96		46 - 125	03/08/18 06:47	03/08/18 17:41	1
Terphenyl-d14	84		35 - 160	03/08/18 06:47	03/08/18 17:41	1
2,4,6-Tribromophenol	108		25 - 139	03/08/18 06:47	03/08/18 17:41	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Arsenic</b>	<b>6.0</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Barium</b>	<b>68</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Beryllium</b>	<b>0.64</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Chromium</b>	<b>18</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Cobalt</b>	<b>9.9</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Copper</b>	<b>16</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Iron</b>	<b>21000</b>		11	5.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Lead</b>	<b>14</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Magnesium</b>	<b>3200 B</b>		5.6	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Calcium</b>	<b>2600 B</b>		11	1.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Manganese</b>	<b>290</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Nickel</b>	<b>23</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Selenium</b>	<b>0.66</b>		0.56	0.33	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Vanadium</b>	<b>29</b>		0.28	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Zinc</b>	<b>52</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Potassium</b>	<b>1000</b>		28	10	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1
<b>Sodium</b>	<b>48 J B</b>		56	8.4	mg/Kg	☼	03/08/18 17:11	03/10/18 05:45	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Barium</b>	<b>0.18 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:56	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>57</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:56	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Iron</b>	<b>0.66</b>		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Magnesium</b>	<b>23</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Manganese</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
Nickel	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Potassium</b>	<b>0.95</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:56	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:56	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:56	1
<b>Zinc</b>	<b>0.035</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:56	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:43	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.020	0.0065	mg/Kg	☼	03/08/18 13:31	03/09/18 09:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	03/08/18 11:07	03/08/18 16:01	1
<b>pH</b>	<b>7.5</b>		0.20	0.20	SU			03/12/18 18:01	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 83.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Carbon disulfide	<0.0043		0.0043	0.00088	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		75 - 131	03/06/18 18:00	03/08/18 19:26	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/08/18 19:26	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	03/06/18 18:00	03/08/18 19:26	1
Toluene-d8 (Surr)	99		75 - 124	03/06/18 18:00	03/08/18 19:26	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 83.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 83.6**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Phenanthrene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		44 - 121				03/08/18 06:47	03/08/18 18:07	1
2-Fluorophenol	96		46 - 133				03/08/18 06:47	03/08/18 18:07	1
Nitrobenzene-d5	86		41 - 120				03/08/18 06:47	03/08/18 18:07	1
Phenol-d5	85		46 - 125				03/08/18 06:47	03/08/18 18:07	1
Terphenyl-d14	80		35 - 160				03/08/18 06:47	03/08/18 18:07	1
2,4,6-Tribromophenol	99		25 - 139				03/08/18 06:47	03/08/18 18:07	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Arsenic</b>	<b>5.9</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Barium</b>	<b>45</b>		0.58	0.066	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Beryllium</b>	<b>0.46</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Chromium</b>	<b>14</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Cobalt</b>	<b>8.6</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Copper</b>	<b>17</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Iron</b>	<b>16000</b>		12	6.0	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Lead</b>	<b>11</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Magnesium</b>	<b>9700 B</b>		5.8	2.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Calcium</b>	<b>14000 B</b>		12	2.0	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Manganese</b>	<b>380</b>		0.58	0.084	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Nickel</b>	<b>20</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Selenium</b>	<b>0.45 J</b>		0.58	0.34	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Vanadium</b>	<b>24</b>		0.29	0.068	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Zinc</b>	<b>56</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Potassium</b>	<b>860</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1
<b>Sodium</b>	<b>57 J B</b>		58	8.6	mg/Kg	☼	03/08/18 17:11	03/10/18 05:49	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Barium</b>	<b>0.39 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Cadmium</b>	<b>0.0021 J</b>		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 83.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>220</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:00	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Manganese</b>	<b>0.088</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Nickel</b>	<b>0.014</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
<b>Potassium</b>	<b>1.3</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:00	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:00	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:00	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:00	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:02	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:45	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.026</b>		0.019	0.0064	mg/Kg	☼	03/08/18 13:31	03/09/18 09:24	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	03/08/18 11:07	03/08/18 16:02	1
<b>pH</b>	<b>7.2</b>		0.20	0.20	SU			03/12/18 18:03	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

Date Collected: 03/05/18 11:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 81.2

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/06/18 18:00	03/08/18 19:51	1
Dibromofluoromethane	91		75 - 126	03/06/18 18:00	03/08/18 19:51	1
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	03/06/18 18:00	03/08/18 19:51	1
Toluene-d8 (Surr)	99		75 - 124	03/06/18 18:00	03/08/18 19:51	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.43</b>		0.21	0.075	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		44 - 121	03/08/18 06:47	03/08/18 18:34	1
2-Fluorophenol	95		46 - 133	03/08/18 06:47	03/08/18 18:34	1
Nitrobenzene-d5	90		41 - 120	03/08/18 06:47	03/08/18 18:34	1
Phenol-d5	96		46 - 125	03/08/18 06:47	03/08/18 18:34	1
Terphenyl-d14	79		35 - 160	03/08/18 06:47	03/08/18 18:34	1
2,4,6-Tribromophenol	108		25 - 139	03/08/18 06:47	03/08/18 18:34	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Arsenic</b>	<b>2.7</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Barium</b>	<b>89</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Beryllium</b>	<b>0.59</b>		0.22	0.053	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Chromium</b>	<b>14</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Cobalt</b>	<b>4.1</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Copper</b>	<b>15</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Iron</b>	<b>13000</b>		11	5.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Lead</b>	<b>9.7</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Magnesium</b>	<b>2500 B</b>		5.6	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Calcium</b>	<b>2700 B</b>		11	1.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Manganese</b>	<b>78</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Nickel</b>	<b>14</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Vanadium</b>	<b>21</b>		0.28	0.066	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Zinc</b>	<b>46</b>		1.1	0.49	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Potassium</b>	<b>710</b>		28	9.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1
<b>Sodium</b>	<b>45 J B</b>		56	8.3	mg/Kg	☼	03/08/18 17:11	03/10/18 05:53	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Barium</b>	<b>0.25 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:04	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>54</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:04	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Iron</b>	<b>0.54</b>		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Magnesium</b>	<b>21</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Manganese</b>	<b>0.018</b>	<b>J</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
Nickel	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Potassium</b>	<b>0.76</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:04	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:04	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:04	1
<b>Zinc</b>	<b>0.072</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:04	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:05	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:46	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.018	0.0061	mg/Kg	☼	03/08/18 13:31	03/09/18 09:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	03/08/18 11:07	03/08/18 16:02	1
<b>pH</b>	<b>7.1</b>		0.20	0.20	SU			03/12/18 18:05	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

Date Collected: 03/05/18 12:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 80.6

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/06/18 18:00	03/08/18 20:16	1
Dibromofluoromethane	94		75 - 126	03/06/18 18:00	03/08/18 20:16	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/06/18 18:00	03/08/18 20:16	1
Toluene-d8 (Surr)	97		75 - 124	03/06/18 18:00	03/08/18 20:16	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

**Date Collected: 03/05/18 12:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 80.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

Date Collected: 03/05/18 12:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 80.6

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		44 - 121	03/08/18 06:47	03/08/18 19:00	1
2-Fluorophenol	98		46 - 133	03/08/18 06:47	03/08/18 19:00	1
Nitrobenzene-d5	90		41 - 120	03/08/18 06:47	03/08/18 19:00	1
Phenol-d5	94		46 - 125	03/08/18 06:47	03/08/18 19:00	1
Terphenyl-d14	81		35 - 160	03/08/18 06:47	03/08/18 19:00	1
2,4,6-Tribromophenol	121		25 - 139	03/08/18 06:47	03/08/18 19:00	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Arsenic</b>	<b>7.4</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Barium</b>	<b>68</b>		0.58	0.066	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Beryllium</b>	<b>0.88</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Chromium</b>	<b>23</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Cobalt</b>	<b>15</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Copper</b>	<b>25</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Iron</b>	<b>25000</b>		12	6.0	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Lead</b>	<b>16</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Magnesium</b>	<b>9900</b>	<b>B</b>	5.8	2.9	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Calcium</b>	<b>9500</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Manganese</b>	<b>400</b>		0.58	0.084	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Nickel</b>	<b>41</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Selenium</b>	<b>0.57</b>	<b>J</b>	0.58	0.34	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Vanadium</b>	<b>28</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Zinc</b>	<b>67</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Potassium</b>	<b>2500</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1
<b>Sodium</b>	<b>340</b>	<b>B</b>	58	8.6	mg/Kg	☼	03/08/18 17:11	03/10/18 05:57	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Barium</b>	<b>0.33</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:08	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

**Date Collected: 03/05/18 12:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 80.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>230</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:08	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Iron</b>	<b>0.27</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Manganese</b>	<b>0.26</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Nickel</b>	<b>0.013</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
<b>Potassium</b>	<b>1.1</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:08	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:08	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:08	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:08	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.2</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:52	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:06	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:48	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.038</b>		0.019	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 09:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	03/08/18 11:07	03/08/18 16:02	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/12/18 18:07	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

Date Collected: 03/05/18 13:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.6

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Chloroethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		75 - 131	03/06/18 18:00	03/08/18 20:41	1
Dibromofluoromethane	94		75 - 126	03/06/18 18:00	03/08/18 20:41	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	03/06/18 18:00	03/08/18 20:41	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/08/18 20:41	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
<b>Benzo[a]anthracene</b>	<b>0.035</b>	<b>J</b>	0.041	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

**Date Collected: 03/05/18 13:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.046		0.041	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Benzo[b]fluoranthene	0.060		0.041	0.0088	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Benzo[g,h,i]perylene	0.034	J	0.041	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Benzo[k]fluoranthene	0.029	J	0.041	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Chrysene	0.046		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Dibenz(a,h)anthracene	0.010	J	0.041	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Fluoranthene	0.085		0.041	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Indeno[1,2,3-cd]pyrene	0.031	J	0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

Date Collected: 03/05/18 13:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.6

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
<b>Phenanthrene</b>	<b>0.023</b>	<b>J</b>	0.041	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
<b>Pyrene</b>	<b>0.050</b>		0.041	0.0081	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 23:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	99		44 - 121				03/08/18 06:47	03/08/18 23:26	1
2-Fluorophenol	101		46 - 133				03/08/18 06:47	03/08/18 23:26	1
Nitrobenzene-d5	91		41 - 120				03/08/18 06:47	03/08/18 23:26	1
Phenol-d5	95		46 - 125				03/08/18 06:47	03/08/18 23:26	1
Terphenyl-d14	78		35 - 160				03/08/18 06:47	03/08/18 23:26	1
2,4,6-Tribromophenol	125		25 - 139				03/08/18 06:47	03/08/18 23:26	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Arsenic</b>	<b>5.3</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Barium</b>	<b>47</b>		0.59	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Beryllium</b>	<b>0.57</b>		0.23	0.055	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Chromium</b>	<b>15</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Cobalt</b>	<b>11</b>		0.29	0.077	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Copper</b>	<b>16</b>		0.59	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Iron</b>	<b>16000</b>		12	6.1	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Lead</b>	<b>18</b>		0.29	0.14	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Magnesium</b>	<b>9000</b>	<b>B</b>	5.9	2.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Calcium</b>	<b>13000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Manganese</b>	<b>410</b>		0.59	0.085	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Nickel</b>	<b>21</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Selenium</b>	<b>0.56</b>	<b>J</b>	0.59	0.34	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Vanadium</b>	<b>22</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Zinc</b>	<b>51</b>		1.2	0.52	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Potassium</b>	<b>1700</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1
<b>Sodium</b>	<b>670</b>	<b>B</b>	59	8.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:01	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Barium</b>	<b>0.30</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Cadmium</b>	<b>0.0025</b>	<b>J</b>	0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:12	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

**Date Collected: 03/05/18 13:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>250</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:12	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Iron</b>	<b>0.31</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Manganese</b>	<b>0.74</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Nickel</b>	<b>0.011</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Potassium</b>	<b>6.2</b>	<b>B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:12	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:12	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:12	1
<b>Zinc</b>	<b>0.036</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:12	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.72</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 18:56	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:06	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:53	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.029</b>		0.019	0.0064	mg/Kg	☼	03/08/18 13:31	03/09/18 09:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.21	mg/Kg	☼	03/08/18 11:07	03/08/18 16:03	1
<b>pH</b>	<b>7.1</b>		0.20	0.20	SU			03/12/18 18:10	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.4**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 21:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/06/18 18:00	03/08/18 21:07	1
Dibromofluoromethane	89		75 - 126	03/06/18 18:00	03/08/18 21:07	1
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	03/06/18 18:00	03/08/18 21:07	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/08/18 21:07	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Acenaphthylene	<0.037		0.037	0.0048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Anthracene	<0.037		0.037	0.0061	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Benzo[a]anthracene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Benzo[b]fluoranthene	<0.037		0.037	0.0079	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Phenol	<0.18		0.18	0.082	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
Pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	97		44 - 121	03/08/18 06:47	03/08/18 19:27	1
2-Fluorophenol	101		46 - 133	03/08/18 06:47	03/08/18 19:27	1
Nitrobenzene-d5	95		41 - 120	03/08/18 06:47	03/08/18 19:27	1
Phenol-d5	100		46 - 125	03/08/18 06:47	03/08/18 19:27	1
Terphenyl-d14	80		35 - 160	03/08/18 06:47	03/08/18 19:27	1
2,4,6-Tribromophenol	116		25 - 139	03/08/18 06:47	03/08/18 19:27	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Arsenic</b>	<b>5.1</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Barium</b>	<b>40</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Beryllium</b>	<b>0.57</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Chromium</b>	<b>14</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Cobalt</b>	<b>10</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Copper</b>	<b>17</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Iron</b>	<b>16000</b>		11	5.6	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Magnesium</b>	<b>31000 B</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Calcium</b>	<b>91000 B</b>		110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:37	10
<b>Manganese</b>	<b>400</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Selenium</b>	<b>0.34 J</b>		0.54	0.32	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Vanadium</b>	<b>19</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Zinc</b>	<b>43</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Potassium</b>	<b>2000</b>		27	9.5	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1
<b>Sodium</b>	<b>110 B</b>		54	7.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:05	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
<b>Barium</b>	<b>0.34 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>850</b>		50	5.0	mg/L		03/09/18 14:58	03/13/18 13:59	10
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:24	1
<b>Magnesium</b>	<b>30</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:24	1
<b>Manganese</b>	<b>0.086</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Nickel	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
<b>Potassium</b>	<b>1.1</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:24	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:24	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:24	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:24	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:07	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:55	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.014</b>	<b>J</b>	0.017	0.0058	mg/Kg	☼	03/08/18 13:31	03/09/18 09:33	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	03/08/18 11:07	03/08/18 16:03	1
<b>pH</b>	<b>7.7</b>		0.20	0.20	SU			03/12/18 18:12	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	03/06/18 18:00	03/08/18 21:32	1
Dibromofluoromethane	90		75 - 126	03/06/18 18:00	03/08/18 21:32	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	03/06/18 18:00	03/08/18 21:32	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/08/18 21:32	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Benzo[a]anthracene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.010</b>	<b>J</b>	0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Benzo[b]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Fluoranthene</b>	<b>0.024</b>	<b>J</b>	0.037	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

Date Collected: 03/05/18 09:55

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 87.3

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Phenanthrene</b>	<b>0.018</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Pyrene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 19:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	99		44 - 121				03/08/18 06:47	03/08/18 19:54	1
2-Fluorophenol	100		46 - 133				03/08/18 06:47	03/08/18 19:54	1
Nitrobenzene-d5	92		41 - 120				03/08/18 06:47	03/08/18 19:54	1
Phenol-d5	99		46 - 125				03/08/18 06:47	03/08/18 19:54	1
Terphenyl-d14	80		35 - 160				03/08/18 06:47	03/08/18 19:54	1
2,4,6-Tribromophenol	113		25 - 139				03/08/18 06:47	03/08/18 19:54	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Arsenic</b>	<b>6.2</b>		0.53	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Barium</b>	<b>37</b>		0.53	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Beryllium</b>	<b>0.57</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Chromium</b>	<b>15</b>		0.53	0.26	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Cobalt</b>	<b>12</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Copper</b>	<b>19</b>		0.53	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Iron</b>	<b>16000</b>		11	5.5	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Magnesium</b>	<b>35000</b>	<b>B</b>	5.3	2.6	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Calcium</b>	<b>130000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:42	10
<b>Manganese</b>	<b>400</b>		0.53	0.077	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Nickel</b>	<b>28</b>		0.53	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Vanadium</b>	<b>19</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Zinc</b>	<b>45</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Potassium</b>	<b>2200</b>		27	9.4	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1
<b>Sodium</b>	<b>130</b>	<b>B</b>	53	7.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:09	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
<b>Barium</b>	<b>0.33</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:29	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.3**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>840</b>		50	5.0	mg/L		03/09/18 14:58	03/13/18 14:15	10
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:29	1
<b>Magnesium</b>	<b>30</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:29	1
<b>Manganese</b>	<b>0.25</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Nickel	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
<b>Potassium</b>	<b>1.1</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:29	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:29	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:29	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:29	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.25</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 19:05	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:08	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:56	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.018	0.0061	mg/Kg	☼	03/08/18 13:31	03/09/18 09:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/08/18 11:07	03/08/18 16:03	1
<b>pH</b>	<b>7.6</b>		0.20	0.20	SU			03/12/18 18:14	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

Date Collected: 03/05/18 11:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.8

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/06/18 18:00	03/08/18 21:58	1
Dibromofluoromethane	91		75 - 126	03/06/18 18:00	03/08/18 21:58	1
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	03/06/18 18:00	03/08/18 21:58	1
Toluene-d8 (Surr)	99		75 - 124	03/06/18 18:00	03/08/18 21:58	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

**Date Collected: 03/05/18 11:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

Date Collected: 03/05/18 11:00

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.8

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	03/08/18 06:47	03/08/18 20:20	1
2-Fluorophenol	94		46 - 133	03/08/18 06:47	03/08/18 20:20	1
Nitrobenzene-d5	86		41 - 120	03/08/18 06:47	03/08/18 20:20	1
Phenol-d5	88		46 - 125	03/08/18 06:47	03/08/18 20:20	1
Terphenyl-d14	77		35 - 160	03/08/18 06:47	03/08/18 20:20	1
2,4,6-Tribromophenol	103		25 - 139	03/08/18 06:47	03/08/18 20:20	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Arsenic</b>	<b>6.9</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Barium</b>	<b>76</b>		0.58	0.066	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Beryllium</b>	<b>0.64</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Chromium</b>	<b>18</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Cobalt</b>	<b>14</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Copper</b>	<b>16</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Iron</b>	<b>21000</b>		12	6.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Lead</b>	<b>14</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Magnesium</b>	<b>3100 B</b>		5.8	2.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Calcium</b>	<b>2300 B</b>		12	2.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Manganese</b>	<b>470</b>		0.58	0.084	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Nickel</b>	<b>20</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Selenium</b>	<b>0.52 J</b>		0.58	0.34	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Vanadium</b>	<b>34</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Zinc</b>	<b>55</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Potassium</b>	<b>860</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1
<b>Sodium</b>	<b>36 J B</b>		58	8.6	mg/Kg	☼	03/08/18 17:11	03/10/18 06:13	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
<b>Barium</b>	<b>0.35 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:33	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

**Date Collected: 03/05/18 11:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>89</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:33	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:33	1
<b>Magnesium</b>	<b>42</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:33	1
<b>Manganese</b>	<b>0.014</b>	<b>J</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
<b>Nickel</b>	<b>0.018</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
<b>Potassium</b>	<b>0.77</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:33	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:33	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:33	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:33	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:09	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:58	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.043</b>		0.019	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 09:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	03/08/18 11:07	03/08/18 16:04	1
<b>pH</b>	<b>6.9</b>		0.20	0.20	SU			03/12/18 18:16	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.9**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/06/18 18:00	03/08/18 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/06/18 18:00	03/08/18 22:23	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/08/18 22:23	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/06/18 18:00	03/08/18 22:23	1
Toluene-d8 (Surr)	99		75 - 124	03/06/18 18:00	03/08/18 22:23	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

Date Collected: 03/05/18 11:30

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.9

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		44 - 121	03/08/18 06:47	03/08/18 20:47	1
2-Fluorophenol	97		46 - 133	03/08/18 06:47	03/08/18 20:47	1
Nitrobenzene-d5	89		41 - 120	03/08/18 06:47	03/08/18 20:47	1
Phenol-d5	94		46 - 125	03/08/18 06:47	03/08/18 20:47	1
Terphenyl-d14	77		35 - 160	03/08/18 06:47	03/08/18 20:47	1
2,4,6-Tribromophenol	98		25 - 139	03/08/18 06:47	03/08/18 20:47	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Arsenic</b>	<b>5.8</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Barium</b>	<b>43</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Beryllium</b>	<b>0.66</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Chromium</b>	<b>18</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Cobalt</b>	<b>11</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Copper</b>	<b>20</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Iron</b>	<b>18000</b>		11	5.6	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Magnesium</b>	<b>33000</b>	<b>B</b>	5.4	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Calcium</b>	<b>74000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:54	10
<b>Manganese</b>	<b>320</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Vanadium</b>	<b>22</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Zinc</b>	<b>48</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Potassium</b>	<b>2400</b>		27	9.5	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1
<b>Sodium</b>	<b>130</b>	<b>B</b>	54	7.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:17	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
<b>Barium</b>	<b>0.31</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:37	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>500</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:37	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:37	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:37	1
<b>Manganese</b>	<b>0.068</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
Nickel	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
<b>Potassium</b>	<b>0.98</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:37	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:37	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:37	1
<b>Zinc</b>	<b>0.032</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:37	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:10	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:59	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.017	0.0056	mg/Kg	☼	03/08/18 13:31	03/09/18 09:40	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	03/08/18 11:07	03/08/18 16:04	1
<b>pH</b>	<b>7.7</b>		0.20	0.20	SU			03/12/18 18:18	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/06/18 18:00	03/09/18 12:29	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/09/18 12:29	1
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	03/06/18 18:00	03/09/18 12:29	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 12:29	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

Date Collected: 03/05/18 12:30

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 85.8

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Phenanthrene	<0.037		0.037	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 21:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		44 - 121	03/08/18 06:47	03/08/18 21:13	1
2-Fluorophenol	99		46 - 133	03/08/18 06:47	03/08/18 21:13	1
Nitrobenzene-d5	91		41 - 120	03/08/18 06:47	03/08/18 21:13	1
Phenol-d5	99		46 - 125	03/08/18 06:47	03/08/18 21:13	1
Terphenyl-d14	77		35 - 160	03/08/18 06:47	03/08/18 21:13	1
2,4,6-Tribromophenol	112		25 - 139	03/08/18 06:47	03/08/18 21:13	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Arsenic</b>	<b>3.3</b>		0.57	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Barium</b>	<b>58</b>		0.57	0.065	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Beryllium</b>	<b>0.43</b>		0.23	0.054	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
Cadmium	<0.11		0.11	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Chromium</b>	<b>11</b>		0.57	0.28	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Cobalt</b>	<b>13</b>		0.29	0.075	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Copper</b>	<b>54</b>		0.57	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Iron</b>	<b>23000</b>		11	6.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Lead</b>	<b>8.6</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Magnesium</b>	<b>9100 B</b>		5.7	2.8	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Calcium</b>	<b>15000 B</b>		11	1.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Manganese</b>	<b>490</b>		0.57	0.083	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Nickel</b>	<b>13</b>		0.57	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Selenium</b>	<b>0.79</b>		0.57	0.34	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Vanadium</b>	<b>25</b>		0.29	0.068	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Zinc</b>	<b>40</b>		1.1	0.50	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Potassium</b>	<b>1300</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1
<b>Sodium</b>	<b>530 B</b>		57	8.5	mg/Kg	☼	03/08/18 17:11	03/10/18 06:21	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Barium</b>	<b>0.33 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Cadmium</b>	<b>0.0021 J</b>		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:41	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>380</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:41	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Manganese</b>	<b>0.67</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Nickel</b>	<b>0.010</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
<b>Potassium</b>	<b>2.6</b>	<b>B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:41	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:41	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:41	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:41	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 19:29	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:11	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 12:01	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.016</b>	<b>J</b>	0.017	0.0057	mg/Kg	☼	03/08/18 13:31	03/09/18 09:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	03/08/18 11:07	03/08/18 16:04	1
<b>pH</b>	<b>8.3</b>		0.20	0.20	SU			03/12/18 18:20	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

Date Collected: 03/05/18 12:50

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 85.9

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/06/18 18:00	03/09/18 12:55	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/09/18 12:55	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/06/18 18:00	03/09/18 12:55	1
Toluene-d8 (Surr)	97		75 - 124	03/06/18 18:00	03/09/18 12:55	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

**Date Collected: 03/05/18 12:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

Date Collected: 03/05/18 12:50

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 85.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		44 - 121	03/08/18 06:47	03/08/18 23:00	1
2-Fluorophenol	99		46 - 133	03/08/18 06:47	03/08/18 23:00	1
Nitrobenzene-d5	93		41 - 120	03/08/18 06:47	03/08/18 23:00	1
Phenol-d5	100		46 - 125	03/08/18 06:47	03/08/18 23:00	1
Terphenyl-d14	81		35 - 160	03/08/18 06:47	03/08/18 23:00	1
2,4,6-Tribromophenol	110		25 - 139	03/08/18 06:47	03/08/18 23:00	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Arsenic</b>	<b>5.9</b>		0.54	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Barium</b>	<b>35</b>		0.54	0.061	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Beryllium</b>	<b>0.55</b>		0.21	0.050	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Chromium</b>	<b>14</b>		0.54	0.26	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Cobalt</b>	<b>11</b>		0.27	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Copper</b>	<b>20</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Iron</b>	<b>16000</b>		11	5.6	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Lead</b>	<b>12</b>		0.27	0.12	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Magnesium</b>	<b>38000 B</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Calcium</b>	<b>110000 B</b>		110	18	mg/Kg	☼	03/08/18 17:11	03/13/18 00:58	10
<b>Manganese</b>	<b>350</b>		0.54	0.078	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Selenium</b>	<b>0.36 J</b>		0.54	0.31	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Vanadium</b>	<b>19</b>		0.27	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Zinc</b>	<b>46</b>		1.1	0.47	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Potassium</b>	<b>2200</b>		27	9.5	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1
<b>Sodium</b>	<b>480 B</b>		54	7.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:33	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Barium</b>	<b>0.31 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:45	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

**Date Collected: 03/05/18 12:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>460</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:45	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Iron</b>	<b>0.33</b>	<b>J</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Manganese</b>	<b>0.14</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Nickel</b>	<b>0.012</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Potassium</b>	<b>1.2</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:45	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:45	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:45	1
<b>Zinc</b>	<b>0.063</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:45	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:12	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 12:02	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.014</b>	<b>J</b>	0.018	0.0061	mg/Kg	☼	03/08/18 13:31	03/09/18 09:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	03/08/18 15:20	03/09/18 15:34	1
<b>pH</b>	<b>8.5</b>		0.20	0.20	SU			03/12/18 18:23	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 82.9**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Chloroethane	<0.0044 *		0.0044	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/06/18 18:00	03/09/18 13:20	1
Dibromofluoromethane	89		75 - 126	03/06/18 18:00	03/09/18 13:20	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/09/18 13:20	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 13:20	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 82.9**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

Date Collected: 03/05/18 10:40

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 82.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		44 - 121				03/08/18 06:47	03/08/18 21:40	1
2-Fluorophenol	97		46 - 133				03/08/18 06:47	03/08/18 21:40	1
Nitrobenzene-d5	90		41 - 120				03/08/18 06:47	03/08/18 21:40	1
Phenol-d5	90		46 - 125				03/08/18 06:47	03/08/18 21:40	1
Terphenyl-d14	79		35 - 160				03/08/18 06:47	03/08/18 21:40	1
2,4,6-Tribromophenol	112		25 - 139				03/08/18 06:47	03/08/18 21:40	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Arsenic</b>	<b>6.4</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Barium</b>	<b>56</b>		0.59	0.067	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Beryllium</b>	<b>0.57</b>		0.24	0.055	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
Cadmium	<0.12		0.12	0.021	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Chromium</b>	<b>16</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Cobalt</b>	<b>8.4</b>		0.29	0.077	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Copper</b>	<b>17</b>		0.59	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Iron</b>	<b>19000</b>		12	6.1	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Lead</b>	<b>12</b>		0.29	0.14	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Magnesium</b>	<b>7900 B</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Calcium</b>	<b>10000 B</b>		12	2.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Manganese</b>	<b>330</b>		0.59	0.085	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Nickel</b>	<b>19</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Selenium</b>	<b>0.83</b>		0.59	0.35	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Vanadium</b>	<b>27</b>		0.29	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Zinc</b>	<b>49</b>		1.2	0.52	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Potassium</b>	<b>840</b>		29	10	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1
<b>Sodium</b>	<b>62 B</b>		59	8.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:37	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
<b>Barium</b>	<b>0.45 J</b>		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:50	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 82.9**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>300</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:50	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:50	1
<b>Magnesium</b>	<b>170</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:50	1
<b>Manganese</b>	<b>0.35</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
<b>Nickel</b>	<b>0.017</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
<b>Potassium</b>	<b>0.78</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:50	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:50	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:50	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:50	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.63</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 19:38	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:13	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 12:04	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.043</b>		0.019	0.0063	mg/Kg	☼	03/08/18 13:31	03/09/18 09:51	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:37	1
<b>pH</b>	<b>7.2</b>		0.20	0.20	SU			03/12/18 18:25	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

Date Collected: 03/05/18 10:50

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 85.8

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	03/06/18 18:00	03/09/18 13:45	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/09/18 13:45	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/06/18 18:00	03/09/18 13:45	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 13:45	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

**Date Collected: 03/05/18 10:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

**Date Collected: 03/05/18 10:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		44 - 121	03/08/18 06:47	03/08/18 22:06	1
2-Fluorophenol	96		46 - 133	03/08/18 06:47	03/08/18 22:06	1
Nitrobenzene-d5	94		41 - 120	03/08/18 06:47	03/08/18 22:06	1
Phenol-d5	94		46 - 125	03/08/18 06:47	03/08/18 22:06	1
Terphenyl-d14	81		35 - 160	03/08/18 06:47	03/08/18 22:06	1
2,4,6-Tribromophenol	97		25 - 139	03/08/18 06:47	03/08/18 22:06	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.21</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Arsenic</b>	<b>5.8</b>		0.55	0.19	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Barium</b>	<b>28</b>		0.55	0.063	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Beryllium</b>	<b>0.53</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
Cadmium	<0.11		0.11	0.020	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Chromium</b>	<b>15</b>		0.55	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Cobalt</b>	<b>10</b>		0.27	0.072	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Copper</b>	<b>20</b>		0.55	0.15	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Iron</b>	<b>16000</b>		11	5.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Lead</b>	<b>11</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Magnesium</b>	<b>33000</b>	<b>B</b>	5.5	2.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 17:11	03/13/18 01:02	10
<b>Manganese</b>	<b>320</b>		0.55	0.080	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Nickel</b>	<b>26</b>		0.55	0.16	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Selenium</b>	<b>0.56</b>		0.55	0.32	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
Silver	<0.27		0.27	0.071	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Vanadium</b>	<b>20</b>		0.27	0.065	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Zinc</b>	<b>52</b>		1.1	0.48	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Potassium</b>	<b>2300</b>		27	9.7	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1
<b>Sodium</b>	<b>130</b>	<b>B</b>	55	8.1	mg/Kg	☼	03/08/18 17:11	03/10/18 06:41	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
<b>Barium</b>	<b>0.26</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:54	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

**Date Collected: 03/05/18 10:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>830</b>		50	5.0	mg/L		03/09/18 14:58	03/13/18 14:19	10
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:54	1
<b>Magnesium</b>	<b>46</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:54	1
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
<b>Nickel</b>	<b>0.011</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
<b>Potassium</b>	<b>1.9</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:54	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:54	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:54	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:54	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 19:43	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:44	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 12:06	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.011</b>	<b>J</b>	0.018	0.0060	mg/Kg	☼	03/08/18 13:31	03/09/18 10:00	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:37	1
<b>pH</b>	<b>8.0</b>		0.20	0.20	SU			03/12/18 18:27	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

Date Collected: 03/05/18 12:05

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.7

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/06/18 18:00	03/09/18 14:10	1
Dibromofluoromethane	93		75 - 126	03/06/18 18:00	03/09/18 14:10	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/06/18 18:00	03/09/18 14:10	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 14:10	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

**Date Collected: 03/05/18 12:05**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.7**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

Date Collected: 03/05/18 12:05

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.7

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Phenol	<0.21		0.21	0.092	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 06:47	03/08/18 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	101		44 - 121				03/08/18 06:47	03/08/18 22:33	1
2-Fluorophenol	103		46 - 133				03/08/18 06:47	03/08/18 22:33	1
Nitrobenzene-d5	94		41 - 120				03/08/18 06:47	03/08/18 22:33	1
Phenol-d5	102		46 - 125				03/08/18 06:47	03/08/18 22:33	1
Terphenyl-d14	81		35 - 160				03/08/18 06:47	03/08/18 22:33	1
2,4,6-Tribromophenol	123		25 - 139				03/08/18 06:47	03/08/18 22:33	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Arsenic</b>	<b>6.6</b>		0.61	0.21	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Barium</b>	<b>71</b>		0.61	0.070	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Beryllium</b>	<b>0.93</b>		0.25	0.057	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
Cadmium	<0.12		0.12	0.022	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Chromium</b>	<b>21</b>		0.61	0.30	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Cobalt</b>	<b>15</b>		0.31	0.080	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Copper</b>	<b>21</b>		0.61	0.17	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Iron</b>	<b>22000</b>		12	6.4	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Lead</b>	<b>16</b>		0.31	0.14	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Magnesium</b>	<b>4100</b>	<b>B</b>	6.1	3.0	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Calcium</b>	<b>2100</b>	<b>B</b>	12	2.1	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Manganese</b>	<b>600</b>		0.61	0.089	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Nickel</b>	<b>35</b>		0.61	0.18	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Selenium</b>	<b>0.62</b>		0.61	0.36	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
Silver	<0.31		0.31	0.079	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
Thallium	<0.61		0.61	0.31	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Vanadium</b>	<b>26</b>		0.31	0.072	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Zinc</b>	<b>70</b>		1.2	0.54	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Potassium</b>	<b>2000</b>		31	11	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1
<b>Sodium</b>	<b>800</b>	<b>B</b>	61	9.1	mg/Kg	☼	03/08/18 17:11	03/10/18 06:45	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Barium</b>	<b>0.21</b>	<b>J</b>	0.50	0.050	mg/L		03/09/18 14:58	03/12/18 22:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 22:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 22:58	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

**Date Collected: 03/05/18 12:05**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.7**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>58</b>		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 22:58	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Iron</b>	<b>0.36</b>	<b>J F1</b>	0.40	0.20	mg/L		03/09/18 14:58	03/12/18 22:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Magnesium</b>	<b>19</b>		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Manganese</b>	<b>0.22</b>		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Nickel</b>	<b>0.010</b>	<b>J B</b>	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Potassium</b>	<b>1.1</b>	<b>J B</b>	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 22:58	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 22:58	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 22:58	1
<b>Zinc</b>	<b>0.024</b>	<b>J</b>	0.50	0.020	mg/L		03/09/18 14:58	03/12/18 22:58	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.5</b>		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 19:47	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 18:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 18:45	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 12:07	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.037</b>		0.019	0.0062	mg/Kg	☼	03/08/18 13:31	03/09/18 10:02	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.62		0.62	0.21	mg/Kg	☼	03/08/18 15:20	03/09/18 15:37	1
<b>pH</b>	<b>7.6</b>		0.20	0.20	SU			03/12/18 18:29	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

Date Collected: 03/05/18 12:15

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.6

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
<b>Carbon tetrachloride</b>	<b>0.0011</b>	<b>J</b>	0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/06/18 18:00	03/09/18 14:36	1
Dibromofluoromethane	92		75 - 126	03/06/18 18:00	03/09/18 14:36	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/06/18 18:00	03/09/18 14:36	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 14:36	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

**Date Collected: 03/05/18 12:15**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.6**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Benzo[b]fluoranthene	<0.038	F1	0.038	0.0082	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Benzo[g,h,i]perylene	<0.038	F1	0.038	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Bis(2-chloroethyl)ether	<0.19	F2	0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Dibenz(a,h)anthracene	<0.038	F1	0.038	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4,6-Dinitro-2-methylphenol	<0.76	F2	0.76	0.30	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4-Dinitrophenol	<0.76	F1	0.76	0.67	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Indeno[1,2,3-cd]pyrene	<0.038	F1	0.038	0.0098	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

Date Collected: 03/05/18 12:15

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.6

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Pentachlorophenol	<0.76	F2	0.76	0.61	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	120		44 - 121	03/07/18 17:47	03/08/18 13:51	1
2-Fluorophenol	138	X	46 - 133	03/07/18 17:47	03/08/18 13:51	1
Nitrobenzene-d5	113		41 - 120	03/07/18 17:47	03/08/18 13:51	1
Phenol-d5	136	X	46 - 125	03/07/18 17:47	03/08/18 13:51	1
Terphenyl-d14	96		35 - 160	03/07/18 17:47	03/08/18 13:51	1
2,4,6-Tribromophenol	96		25 - 139	03/07/18 17:47	03/08/18 13:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.20</b>	<b>J B F 1</b>	1.0	0.20	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Arsenic</b>	<b>5.2</b>		0.52	0.18	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Barium</b>	<b>31</b>		0.52	0.059	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Beryllium</b>	<b>0.59</b>		0.21	0.049	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
Cadmium	<0.10		0.10	0.019	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Chromium</b>	<b>16</b>		0.52	0.26	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Cobalt</b>	<b>12</b>		0.26	0.068	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Copper</b>	<b>19</b>		0.52	0.15	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Iron</b>	<b>16000</b>		10	5.4	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Lead</b>	<b>11</b>		0.26	0.12	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Magnesium</b>	<b>34000</b>		5.2	2.6	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Calcium</b>	<b>100000</b>	<b>B</b>	100	18	mg/Kg	☼	03/08/18 07:44	03/13/18 03:47	10
<b>Manganese</b>	<b>350</b>		0.52	0.076	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Nickel</b>	<b>29</b>		0.52	0.15	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
Selenium	<0.52	F1	0.52	0.31	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
Thallium	<0.52	F1	0.52	0.26	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Vanadium</b>	<b>19</b>		0.26	0.062	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Zinc</b>	<b>47</b>		1.0	0.46	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Potassium</b>	<b>2700</b>		26	9.2	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1
<b>Sodium</b>	<b>470</b>		52	7.7	mg/Kg	☼	03/08/18 07:44	03/10/18 00:46	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:48	03/13/18 14:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:48	03/13/18 14:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:48	03/13/18 14:40	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

**Date Collected: 03/05/18 12:15**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.6**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>1000</b>		50	5.0	mg/L		03/13/18 06:48	03/14/18 11:05	10
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Copper</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:48	03/13/18 14:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Magnesium</b>	<b>43</b>		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Manganese</b>	<b>0.99</b>		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Potassium</b>	<b>1.4</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:40	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:48	03/13/18 14:40	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:40	1
<b>Zinc</b>	<b>0.034</b>	<b>J</b>	0.50	0.020	mg/L		03/13/18 06:48	03/13/18 14:40	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.62</b>		0.025	0.010	mg/L		03/09/18 15:01	03/12/18 12:43	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:48	03/14/18 10:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:48	03/14/18 10:01	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:08	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	0.018	0.0058	mg/Kg	☼	03/08/18 14:55	03/09/18 10:09	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.26</b>	<b>J</b>	0.45	0.16	mg/Kg	☼	03/08/18 15:20	03/09/18 15:38	1
<b>pH</b>	<b>8.6</b>		0.20	0.20	SU			03/12/18 18:31	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

Date Collected: 03/05/18 10:20

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.3

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/06/18 18:00	03/09/18 15:01	1
Dibromofluoromethane	91		75 - 126	03/06/18 18:00	03/09/18 15:01	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/06/18 18:00	03/09/18 15:01	1
Toluene-d8 (Surr)	100		75 - 124	03/06/18 18:00	03/09/18 15:01	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

**Date Collected: 03/05/18 10:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

Date Collected: 03/05/18 10:20

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.3

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		44 - 121	03/07/18 17:47	03/08/18 14:15	1
2-Fluorophenol	107		46 - 133	03/07/18 17:47	03/08/18 14:15	1
Nitrobenzene-d5	88		41 - 120	03/07/18 17:47	03/08/18 14:15	1
Phenol-d5	107		46 - 125	03/07/18 17:47	03/08/18 14:15	1
Terphenyl-d14	77		35 - 160	03/07/18 17:47	03/08/18 14:15	1
2,4,6-Tribromophenol	70		25 - 139	03/07/18 17:47	03/08/18 14:15	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Arsenic</b>	<b>11</b>		0.57	0.20	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Barium</b>	<b>36</b>		0.57	0.065	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Beryllium</b>	<b>0.46</b>		0.23	0.054	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
Cadmium	<0.11		0.11	0.021	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Chromium</b>	<b>14</b>		0.57	0.28	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Cobalt</b>	<b>11</b>		0.29	0.075	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Copper</b>	<b>23</b>		0.57	0.16	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Iron</b>	<b>25000</b>		11	6.0	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Lead</b>	<b>15</b>		0.29	0.13	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Magnesium</b>	<b>26000</b>		5.7	2.8	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Calcium</b>	<b>53000</b>	<b>B</b>	110	19	mg/Kg	☼	03/08/18 07:44	03/13/18 04:10	10
<b>Manganese</b>	<b>500</b>		0.57	0.083	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Nickel</b>	<b>29</b>		0.57	0.17	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Selenium</b>	<b>0.64</b>		0.57	0.34	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
Silver	<0.29		0.29	0.074	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Vanadium</b>	<b>22</b>		0.29	0.068	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Zinc</b>	<b>81</b>		1.1	0.50	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Potassium</b>	<b>1300</b>		29	10	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1
<b>Sodium</b>	<b>92</b>		57	8.5	mg/Kg	☼	03/08/18 07:44	03/10/18 01:07	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
<b>Barium</b>	<b>0.30</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:48	03/13/18 14:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:48	03/13/18 14:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:48	03/13/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

Date Collected: 03/05/18 10:20

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.3

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>390</b>		5.0	0.50	mg/L		03/13/18 06:48	03/13/18 14:45	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:48	03/13/18 14:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:48	03/13/18 14:45	1
<b>Magnesium</b>	<b>220</b>		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:45	1
<b>Manganese</b>	<b>0.19</b>		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
<b>Potassium</b>	<b>1.8 J</b>		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:45	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:48	03/13/18 14:45	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:45	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:48	03/13/18 14:45	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.63</b>		0.025	0.010	mg/L		03/09/18 15:01	03/12/18 12:48	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:48	03/14/18 10:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:48	03/14/18 10:02	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:10	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.028</b>		0.019	0.0063	mg/Kg	☼	03/08/18 14:55	03/09/18 10:11	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	03/08/18 15:20	03/09/18 15:38	1
<b>pH</b>	<b>7.0</b>		0.20	0.20	SU			03/12/18 18:33	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	03/06/18 18:00	03/09/18 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/06/18 18:00	03/09/18 15:27	1
Dibromofluoromethane	94		75 - 126	03/06/18 18:00	03/09/18 15:27	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/06/18 18:00	03/09/18 15:27	1
Toluene-d8 (Surr)	98		75 - 124	03/06/18 18:00	03/09/18 15:27	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

Date Collected: 03/05/18 10:30

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 86.8

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.023</b>	<b>J</b>	0.038	0.0074	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
<b>Benzo[g,h,i]perylene</b>	<b>0.016</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/07/18 17:47	03/08/18 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	97		44 - 121	03/07/18 17:47	03/08/18 14:40	1
2-Fluorophenol	109		46 - 133	03/07/18 17:47	03/08/18 14:40	1
Nitrobenzene-d5	89		41 - 120	03/07/18 17:47	03/08/18 14:40	1
Phenol-d5	102		46 - 125	03/07/18 17:47	03/08/18 14:40	1
Terphenyl-d14	80		35 - 160	03/07/18 17:47	03/08/18 14:40	1
2,4,6-Tribromophenol	75		25 - 139	03/07/18 17:47	03/08/18 14:40	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Arsenic</b>	<b>5.5</b>		0.54	0.18	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Barium</b>	<b>32</b>		0.54	0.061	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Beryllium</b>	<b>0.61</b>		0.22	0.050	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
Cadmium	<0.11		0.11	0.019	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Chromium</b>	<b>16</b>		0.54	0.27	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Cobalt</b>	<b>9.6</b>		0.27	0.071	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Copper</b>	<b>20</b>		0.54	0.15	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Iron</b>	<b>17000</b>		11	5.6	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Lead</b>	<b>11</b>		0.27	0.12	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Magnesium</b>	<b>35000</b>		5.4	2.7	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Calcium</b>	<b>130000</b>	<b>B</b>	110	18	mg/Kg	☼	03/08/18 07:44	03/13/18 04:15	10
<b>Manganese</b>	<b>300</b>		0.54	0.078	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Selenium</b>	<b>0.42</b>	<b>J</b>	0.54	0.32	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Vanadium</b>	<b>19</b>		0.27	0.064	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Zinc</b>	<b>48</b>		1.1	0.47	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Potassium</b>	<b>2900</b>		27	9.5	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1
<b>Sodium</b>	<b>140</b>		54	8.0	mg/Kg	☼	03/08/18 07:44	03/10/18 01:11	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:48	03/13/18 14:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Cadmium</b>	<b>0.0021</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:48	03/13/18 14:49	1

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>990</b>		50	5.0	mg/L		03/13/18 06:48	03/14/18 11:09	10
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:48	03/13/18 14:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Magnesium</b>	<b>50</b>		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Manganese</b>	<b>0.67</b>		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Potassium</b>	<b>1.6 J</b>		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 14:49	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:48	03/13/18 14:49	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 14:49	1
<b>Zinc</b>	<b>0.076 J</b>		0.50	0.020	mg/L		03/13/18 06:48	03/13/18 14:49	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.47</b>		0.025	0.010	mg/L		03/09/18 15:01	03/12/18 12:52	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:48	03/14/18 10:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:48	03/14/18 10:03	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 11:11	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.015 J</b>		0.018	0.0061	mg/Kg	☼	03/08/18 14:55	03/09/18 10:18	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	03/08/18 15:20	03/09/18 15:39	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/12/18 18:38	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

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# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

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## Glossary (Continued)

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Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

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- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## GC/MS VOA

### Prep Batch: 422508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	5035	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	5035	
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	5035	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	5035	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	5035	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	5035	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	5035	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	5035	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	5035	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	5035	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	5035	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	5035	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	5035	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	5035	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	5035	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	5035	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	5035	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	5035	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	5035	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	5035	
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	5035	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	5035	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	5035	

### Analysis Batch: 422684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	8260B	422508
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	8260B	422508
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	8260B	422508
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	8260B	422508
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	8260B	422508
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	8260B	422508
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	8260B	422508
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	8260B	422508
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	8260B	422508
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	8260B	422508
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	8260B	422508
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	8260B	422508
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	8260B	422508
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	8260B	422508
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	8260B	422508
MB 500-422684/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-422684/29	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-422684/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 422818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	8260B	422508
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	8260B	422508
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	8260B	422508
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	8260B	422508

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## GC/MS VOA (Continued)

### Analysis Batch: 422818 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	8260B	422508
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	8260B	422508
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	8260B	422508
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	8260B	422508
MB 500-422818/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-422818/4	Lab Control Sample	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 422599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	3541	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	3541	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	3541	
MB 500-422599/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-422599/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-141780-21 MS	2490V2-3-B30 (5-10)	Total/NA	Solid	3541	
500-141780-21 MSD	2490V2-3-B30 (5-10)	Total/NA	Solid	3541	

### Prep Batch: 422624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	3541	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	3541	
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	3541	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	3541	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	3541	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	3541	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	3541	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	3541	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	3541	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	3541	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	3541	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	3541	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	3541	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	3541	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	3541	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	3541	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	3541	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	3541	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	3541	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	3541	
MB 500-422624/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-422624/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	3541	
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	3541	

### Analysis Batch: 422661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-422599/1-A	Method Blank	Total/NA	Solid	8270D	422599
LCS 500-422599/2-A	Lab Control Sample	Total/NA	Solid	8270D	422599

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 422679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	8270D	422599
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	8270D	422599
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	8270D	422599
500-141780-21 MS	2490V2-3-B30 (5-10)	Total/NA	Solid	8270D	422599
500-141780-21 MSD	2490V2-3-B30 (5-10)	Total/NA	Solid	8270D	422599

### Analysis Batch: 422703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-422624/1-A	Method Blank	Total/NA	Solid	8270D	422624
LCS 500-422624/2-A	Lab Control Sample	Total/NA	Solid	8270D	422624

### Analysis Batch: 422736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	8270D	422624
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	8270D	422624
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	8270D	422624
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	8270D	422624
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	8270D	422624
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	8270D	422624
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	8270D	422624
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	8270D	422624
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	8270D	422624
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	8270D	422624
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	8270D	422624
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	8270D	422624
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	8270D	422624
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	8270D	422624
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	8270D	422624
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	8270D	422624
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	8270D	422624
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	8270D	422624
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	8270D	422624
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	8270D	422624
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	8270D	422624
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	8270D	422624

## Metals

### Prep Batch: 422645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	3050B	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	3050B	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	3050B	
MB 500-422645/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-422645/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-141780-21 MS	2490V2-3-B30 (5-10)	Total/NA	Solid	3050B	
500-141780-21 MSD	2490V2-3-B30 (5-10)	Total/NA	Solid	3050B	
500-141780-21 DU	2490V2-3-B30 (5-10)	Total/NA	Solid	3050B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Prep Batch: 422725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	7471B	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	7471B	
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	7471B	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	7471B	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	7471B	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	7471B	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	7471B	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	7471B	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	7471B	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	7471B	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	7471B	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	7471B	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	7471B	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	7471B	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	7471B	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	7471B	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	7471B	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	7471B	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	7471B	
MB 500-422725/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-422725/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-141780-18 MS	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	
500-141780-18 MSD	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	
500-141780-18 DU	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	

### Prep Batch: 422730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	7471B	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	7471B	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	7471B	
MB 500-422730/11-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-422730/12-A	Lab Control Sample	Total/NA	Solid	7471B	

### Leach Batch: 422731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	1311	
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	1311	
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	1311	
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	1311	
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	1311	
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	1311	
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	1311	
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	1311	
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	1311	
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	1311	
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	1311	
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	1311	
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	1311	
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	1311	
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	1311	

TestAmerica Chicago

# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Leach Batch: 422731 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	1311	
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	1311	
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	1311	
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	1311	
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	1311	
LB 500-422731/1-B	Method Blank	TCLP	Solid	1311	
LB 500-422731/1-C	Method Blank	TCLP	Solid	1311	
500-141780-4 MS	2490V2-3-B13 (0-5)	TCLP	Solid	1311	
500-141780-20 MS	2490V2-3-B30 (0-5)	TCLP	Solid	1311	
500-141780-4 DU	2490V2-3-B13 (0-5)	TCLP	Solid	1311	
500-141780-20 DU	2490V2-3-B30 (0-5)	TCLP	Solid	1311	

### Leach Batch: 422734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-2	2490V2-3-B12 (5-10)	SPLP East	Solid	1312	
500-141780-3	2490V2-3-B12 (10-15)	SPLP East	Solid	1312	
500-141780-4	2490V2-3-B13 (0-5)	SPLP East	Solid	1312	
500-141780-5	2490V2-3-B14 (0-5)	SPLP East	Solid	1312	
500-141780-6	2490V2-3-B15 (0-5)	SPLP East	Solid	1312	
500-141780-10	2490V2-3-B22 (0-5)	SPLP East	Solid	1312	
500-141780-11	2490V2-3-B23 (0-5)	SPLP East	Solid	1312	
500-141780-13	2490V2-3-B24 (0-5) Dup	SPLP East	Solid	1312	
500-141780-16	2490V2-3-B27 (0-5)	SPLP East	Solid	1312	
500-141780-18	2490V2-3-B29 (0-5)	SPLP East	Solid	1312	
500-141780-19	2490V2-3-B29 (5-10)	SPLP East	Solid	1312	
500-141780-20	2490V2-3-B30 (0-5)	SPLP East	Solid	1312	
LB 500-422734/1-B	Method Blank	SPLP East	Solid	1312	
500-141780-20 MS	2490V2-3-B30 (0-5)	SPLP East	Solid	1312	
500-141780-20 DU	2490V2-3-B30 (0-5)	SPLP East	Solid	1312	

### Leach Batch: 422735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	SPLP East	Solid	1312	
500-141780-22	2490V2-3-B31 (0-5)	SPLP East	Solid	1312	
500-141780-23	2490V2-3-B31 (5-10)	SPLP East	Solid	1312	
LB 500-422735/1-B	Method Blank	SPLP East	Solid	1312	
500-141780-23 MS	2490V2-3-B31 (5-10)	SPLP East	Solid	1312	
500-141780-23 DU	2490V2-3-B31 (5-10)	SPLP East	Solid	1312	

### Leach Batch: 422740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	1311	
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	1311	
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	1311	
LB 500-422740/1-D	Method Blank	TCLP	Solid	1311	
LB 500-422740/1-E	Method Blank	TCLP	Solid	1311	

### Prep Batch: 422762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	3050B	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	3050B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Prep Batch: 422762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	3050B	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	3050B	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	3050B	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	3050B	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	3050B	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	3050B	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	3050B	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	3050B	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	3050B	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	3050B	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	3050B	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	3050B	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	3050B	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	3050B	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	3050B	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	3050B	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	3050B	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	3050B	
MB 500-422762/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-422762/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	3050B	
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	3050B	
500-141780-1 DU	2490V2-3-B12 (0-5)	Total/NA	Solid	3050B	

### Analysis Batch: 422882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	7471B	422725
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	7471B	422725
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	7471B	422725
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	7471B	422725
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	7471B	422725
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	7471B	422725
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	7471B	422725
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	7471B	422725
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	7471B	422725
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	7471B	422725
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	7471B	422725
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	7471B	422725
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	7471B	422725
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	7471B	422725
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	7471B	422725
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	7471B	422725
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	7471B	422725
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	422725
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	7471B	422725
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	7471B	422725
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	7471B	422730
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	7471B	422730
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	7471B	422730
MB 500-422725/12-A	Method Blank	Total/NA	Solid	7471B	422725
MB 500-422730/11-A	Method Blank	Total/NA	Solid	7471B	422730

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Analysis Batch: 422882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-422725/13-A	Lab Control Sample	Total/NA	Solid	7471B	422725
LCS 500-422730/12-A	Lab Control Sample	Total/NA	Solid	7471B	422730
500-141780-18 MS	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	422725
500-141780-18 MSD	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	422725
500-141780-18 DU	2490V2-3-B29 (0-5)	Total/NA	Solid	7471B	422725

### Prep Batch: 422894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	7470A	422731
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	7470A	422731
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	7470A	422731
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422731
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	7470A	422731
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	7470A	422731
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	7470A	422731
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	7470A	422731
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	7470A	422731
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	7470A	422731
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	7470A	422731
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	7470A	422731
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	7470A	422731
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	7470A	422731
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	7470A	422731
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	7470A	422731
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	7470A	422731
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	7470A	422731
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	7470A	422731
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	7470A	422731
LB 500-422731/1-B	Method Blank	TCLP	Solid	7470A	422731
MB 500-422894/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-422894/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-141780-4 MS	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422731
500-141780-4 DU	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422731

### Prep Batch: 422917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	3010A	422731
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	3010A	422731
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	3010A	422731
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	3010A	422731
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	3010A	422731
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	3010A	422731
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	3010A	422731
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	3010A	422731
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	3010A	422731
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	3010A	422731
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	3010A	422731
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	3010A	422731
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	3010A	422731
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	3010A	422731
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	3010A	422731

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Prep Batch: 422917 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	3010A	422731
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	3010A	422731
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	3010A	422731
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	3010A	422731
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	3010A	422731
LB 500-422731/1-C	Method Blank	TCLP	Solid	3010A	422731
LCS 500-422917/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-141780-20 MS	2490V2-3-B30 (0-5)	TCLP	Solid	3010A	422731
500-141780-20 DU	2490V2-3-B30 (0-5)	TCLP	Solid	3010A	422731

### Prep Batch: 422918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-2	2490V2-3-B12 (5-10)	SPLP East	Solid	3010A	422734
500-141780-3	2490V2-3-B12 (10-15)	SPLP East	Solid	3010A	422734
500-141780-4	2490V2-3-B13 (0-5)	SPLP East	Solid	3010A	422734
500-141780-5	2490V2-3-B14 (0-5)	SPLP East	Solid	3010A	422734
500-141780-6	2490V2-3-B15 (0-5)	SPLP East	Solid	3010A	422734
500-141780-10	2490V2-3-B22 (0-5)	SPLP East	Solid	3010A	422734
500-141780-11	2490V2-3-B23 (0-5)	SPLP East	Solid	3010A	422734
500-141780-13	2490V2-3-B24 (0-5) Dup	SPLP East	Solid	3010A	422734
500-141780-16	2490V2-3-B27 (0-5)	SPLP East	Solid	3010A	422734
500-141780-18	2490V2-3-B29 (0-5)	SPLP East	Solid	3010A	422734
500-141780-19	2490V2-3-B29 (5-10)	SPLP East	Solid	3010A	422734
500-141780-20	2490V2-3-B30 (0-5)	SPLP East	Solid	3010A	422734
LB 500-422734/1-B	Method Blank	SPLP East	Solid	3010A	422734
LCS 500-422918/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-141780-20 MS	2490V2-3-B30 (0-5)	SPLP East	Solid	3010A	422734
500-141780-20 DU	2490V2-3-B30 (0-5)	SPLP East	Solid	3010A	422734

### Prep Batch: 422920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	SPLP East	Solid	3010A	422735
500-141780-22	2490V2-3-B31 (0-5)	SPLP East	Solid	3010A	422735
500-141780-23	2490V2-3-B31 (5-10)	SPLP East	Solid	3010A	422735
LB 500-422735/1-B	Method Blank	SPLP East	Solid	3010A	422735
LCS 500-422920/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-141780-23 MS	2490V2-3-B31 (5-10)	SPLP East	Solid	3010A	422735
500-141780-23 DU	2490V2-3-B31 (5-10)	SPLP East	Solid	3010A	422735

### Analysis Batch: 423061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	6010B	422762
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	6010B	422762
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	6010B	422762
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	6010B	422762
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	6010B	422762
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	6010B	422762
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	6010B	422762
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	6010B	422762
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	6010B	422762

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Analysis Batch: 423061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	6010B	422762
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	6010B	422762
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	6010B	422762
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	6010B	422762
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	6010B	422762
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	6010B	422762
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	6010B	422762
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	6010B	422762
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	6010B	422762
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	6010B	422762
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	6010B	422645
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	6010B	422645
MB 500-422645/1-A	Method Blank	Total/NA	Solid	6010B	422645
MB 500-422762/1-A	Method Blank	Total/NA	Solid	6010B	422762
LCS 500-422645/2-A	Lab Control Sample	Total/NA	Solid	6010B	422645
LCS 500-422762/2-A	Lab Control Sample	Total/NA	Solid	6010B	422762
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-21 MS	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-21 MSD	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-1 DU	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-21 DU	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645

### Analysis Batch: 423140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	7470A	422894
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	7470A	422894
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	7470A	422894
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422894
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	7470A	422894
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	7470A	422894
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	7470A	422894
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	7470A	422894
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	7470A	422894
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	7470A	422894
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	7470A	422894
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	7470A	422894
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	7470A	422894
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	7470A	422894
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	7470A	422894
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	7470A	422894
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	7470A	422894
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	7470A	422894
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	7470A	422894
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	7470A	422894
LB 500-422731/1-B	Method Blank	TCLP	Solid	7470A	422894
MB 500-422894/12-A	Method Blank	Total/NA	Solid	7470A	422894
LCS 500-422894/13-A	Lab Control Sample	Total/NA	Solid	7470A	422894
500-141780-4 MS	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422894
500-141780-4 DU	2490V2-3-B13 (0-5)	TCLP	Solid	7470A	422894

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Prep Batch: 423145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	7470A	422740
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	7470A	422740
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	7470A	422740
LB 500-422740/1-D	Method Blank	TCLP	Solid	7470A	422740
MB 500-423145/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-423145/13-A	Lab Control Sample	Total/NA	Solid	7470A	

## Prep Batch: 423214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	3010A	422740
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	3010A	422740
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	3010A	422740
LB 500-422740/1-E	Method Blank	TCLP	Solid	3010A	422740
LCS 500-423214/2-A	Lab Control Sample	Total/NA	Solid	3010A	

## Analysis Batch: 423234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	6010B	422917
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	6010B	422917
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	6010B	422762
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	6010B	422917
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	6010B	422762
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	6010B	422917
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	6010B	422762
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	6010B	422917
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	6010B	422917
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	6010B	422762
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	6010B	422917
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	6010B	422917
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	6010B	422917
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	6010B	422917
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	6010B	422917
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	6010B	422917
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	6010B	422762
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	6010B	422917
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	6010B	422762
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	6010B	422917
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	6010B	422917
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	6010B	422762
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	6010B	422917
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	6010B	422917
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	6010B	422762
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	6010B	422917
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	6010B	422917
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	6010B	422762
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	6010B	422917
LB 500-422731/1-C	Method Blank	TCLP	Solid	6010B	422917
LCS 500-422917/2-A	Lab Control Sample	Total/NA	Solid	6010B	422917
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762
500-141780-20 MS	2490V2-3-B30 (0-5)	TCLP	Solid	6010B	422917
500-141780-1 DU	2490V2-3-B12 (0-5)	Total/NA	Solid	6010B	422762

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Analysis Batch: 423234 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-20 DU	2490V2-3-B30 (0-5)	TCLP	Solid	6010B	422917

### Analysis Batch: 423235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-2	2490V2-3-B12 (5-10)	SPLP East	Solid	6010B	422918
500-141780-3	2490V2-3-B12 (10-15)	SPLP East	Solid	6010B	422918
500-141780-4	2490V2-3-B13 (0-5)	SPLP East	Solid	6010B	422918
500-141780-5	2490V2-3-B14 (0-5)	SPLP East	Solid	6010B	422918
500-141780-6	2490V2-3-B15 (0-5)	SPLP East	Solid	6010B	422918
500-141780-10	2490V2-3-B22 (0-5)	SPLP East	Solid	6010B	422918
500-141780-11	2490V2-3-B23 (0-5)	SPLP East	Solid	6010B	422918
500-141780-13	2490V2-3-B24 (0-5) Dup	SPLP East	Solid	6010B	422918
500-141780-16	2490V2-3-B27 (0-5)	SPLP East	Solid	6010B	422918
500-141780-18	2490V2-3-B29 (0-5)	SPLP East	Solid	6010B	422918
500-141780-19	2490V2-3-B29 (5-10)	SPLP East	Solid	6010B	422918
500-141780-20	2490V2-3-B30 (0-5)	SPLP East	Solid	6010B	422918
500-141780-21	2490V2-3-B30 (5-10)	SPLP East	Solid	6010B	422920
500-141780-22	2490V2-3-B31 (0-5)	SPLP East	Solid	6010B	422920
500-141780-23	2490V2-3-B31 (5-10)	SPLP East	Solid	6010B	422920
LB 500-422734/1-B	Method Blank	SPLP East	Solid	6010B	422918
LB 500-422735/1-B	Method Blank	SPLP East	Solid	6010B	422920
LCS 500-422918/2-A	Lab Control Sample	Total/NA	Solid	6010B	422918
LCS 500-422920/2-A	Lab Control Sample	Total/NA	Solid	6010B	422920
500-141780-20 MS	2490V2-3-B30 (0-5)	SPLP East	Solid	6010B	422918
500-141780-23 MS	2490V2-3-B31 (5-10)	SPLP East	Solid	6010B	422920
500-141780-20 DU	2490V2-3-B30 (0-5)	SPLP East	Solid	6010B	422918
500-141780-23 DU	2490V2-3-B31 (5-10)	SPLP East	Solid	6010B	422920

### Analysis Batch: 423236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	6010B	422645
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	6010B	422645
500-141780-21 MS	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-21 MSD	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645
500-141780-21 DU	2490V2-3-B30 (5-10)	Total/NA	Solid	6010B	422645

### Analysis Batch: 423264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	TCLP	Solid	6020A	422917
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	6020A	422917
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	6020A	422917
500-141780-4	2490V2-3-B13 (0-5)	TCLP	Solid	6020A	422917
500-141780-5	2490V2-3-B14 (0-5)	TCLP	Solid	6020A	422917
500-141780-6	2490V2-3-B15 (0-5)	TCLP	Solid	6020A	422917
500-141780-7	2490V2-3-B19 (0-5)	TCLP	Solid	6020A	422917
500-141780-8	2490V2-3-B20 (0-5)	TCLP	Solid	6020A	422917
500-141780-9	2490V2-3-B21 (0-5)	TCLP	Solid	6020A	422917
500-141780-10	2490V2-3-B22 (0-5)	TCLP	Solid	6020A	422917
500-141780-11	2490V2-3-B23 (0-5)	TCLP	Solid	6020A	422917
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	6020A	422917

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Metals (Continued)

### Analysis Batch: 423264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	6020A	422917
500-141780-14	2490V2-3-B25 (0-5)	TCLP	Solid	6020A	422917
500-141780-15	2490V2-3-B26 (0-5)	TCLP	Solid	6020A	422917
500-141780-16	2490V2-3-B27 (0-5)	TCLP	Solid	6020A	422917
500-141780-17	2490V2-3-B28 (0-5)	TCLP	Solid	6020A	422917
500-141780-18	2490V2-3-B29 (0-5)	TCLP	Solid	6020A	422917
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	6020A	422917
500-141780-20	2490V2-3-B30 (0-5)	TCLP	Solid	6020A	422917
LB 500-422731/1-C	Method Blank	TCLP	Solid	6020A	422917
LCS 500-422917/2-A	Lab Control Sample	Total/NA	Solid	6020A	422917
500-141780-20 MS	2490V2-3-B30 (0-5)	TCLP	Solid	6020A	422917
500-141780-20 DU	2490V2-3-B30 (0-5)	TCLP	Solid	6020A	422917

### Analysis Batch: 423309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	7470A	423145
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	7470A	423145
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	7470A	423145
LB 500-422740/1-D	Method Blank	TCLP	Solid	7470A	423145
MB 500-423145/12-A	Method Blank	Total/NA	Solid	7470A	423145
LCS 500-423145/13-A	Lab Control Sample	Total/NA	Solid	7470A	423145

### Analysis Batch: 423343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-2	2490V2-3-B12 (5-10)	TCLP	Solid	6010B	422917
500-141780-3	2490V2-3-B12 (10-15)	TCLP	Solid	6010B	422917
500-141780-12	2490V2-3-B24 (0-5)	TCLP	Solid	6010B	422917
500-141780-13	2490V2-3-B24 (0-5) Dup	TCLP	Solid	6010B	422917
500-141780-19	2490V2-3-B29 (5-10)	TCLP	Solid	6010B	422917

### Analysis Batch: 423427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	6010B	423214
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	6010B	423214
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	6010B	423214
LB 500-422740/1-E	Method Blank	TCLP	Solid	6010B	423214
LCS 500-423214/2-A	Lab Control Sample	Total/NA	Solid	6010B	423214

### Analysis Batch: 423473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	6020A	423214
500-141780-22	2490V2-3-B31 (0-5)	TCLP	Solid	6020A	423214
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	6020A	423214
LB 500-422740/1-E	Method Blank	TCLP	Solid	6020A	423214
LCS 500-423214/2-A	Lab Control Sample	Total/NA	Solid	6020A	423214

### Analysis Batch: 423494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	TCLP	Solid	6010B	423214
500-141780-23	2490V2-3-B31 (5-10)	TCLP	Solid	6010B	423214

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## General Chemistry

### Analysis Batch: 422563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	Moisture	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	Moisture	
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	Moisture	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	Moisture	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	Moisture	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	Moisture	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	Moisture	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	Moisture	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	Moisture	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	Moisture	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	Moisture	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	Moisture	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	Moisture	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	Moisture	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	Moisture	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	Moisture	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	Moisture	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	Moisture	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	Moisture	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	Moisture	
500-141780-1 DU	2490V2-3-B12 (0-5)	Total/NA	Solid	Moisture	

### Analysis Batch: 422569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	Moisture	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	Moisture	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	Moisture	
500-141780-22 DU	2490V2-3-B31 (0-5)	Total/NA	Solid	Moisture	

### Prep Batch: 422675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	9010B	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	9010B	
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	9010B	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	9010B	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	9010B	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	9010B	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	9010B	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	9010B	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	9010B	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	9010B	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	9010B	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	9010B	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	9010B	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	9010B	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	9010B	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	9010B	
MB 500-422675/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-422675/2-A	Lab Control Sample	Total/NA	Solid	9010B	
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	9010B	
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	9010B	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Prep Batch: 422712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	9010B	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	9010B	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	9010B	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	9010B	
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	9010B	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	9010B	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	9010B	
MB 500-422712/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-422712/2-A	Lab Control Sample	Total/NA	Solid	9010B	
500-141780-17 MS	2490V2-3-B28 (0-5)	Total/NA	Solid	9010B	
500-141780-17 MSD	2490V2-3-B28 (0-5)	Total/NA	Solid	9010B	

## Analysis Batch: 422929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	9014	422712
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	9014	422712
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	9014	422712
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	9014	422712
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	9014	422712
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	9014	422712
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	9014	422712
MB 500-422712/1-A	Method Blank	Total/NA	Solid	9014	422712
LCS 500-422712/2-A	Lab Control Sample	Total/NA	Solid	9014	422712
500-141780-17 MS	2490V2-3-B28 (0-5)	Total/NA	Solid	9014	422712
500-141780-17 MSD	2490V2-3-B28 (0-5)	Total/NA	Solid	9014	422712

## Analysis Batch: 422933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	9014	422675
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	9014	422675
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	9014	422675
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	9014	422675
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	9014	422675
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	9014	422675
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	9014	422675
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	9014	422675
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	9014	422675
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	9014	422675
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	9014	422675
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	9014	422675
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	9014	422675
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	9014	422675
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	9014	422675
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	9014	422675
MB 500-422675/1-A	Method Blank	Total/NA	Solid	9014	422675
LCS 500-422675/2-A	Lab Control Sample	Total/NA	Solid	9014	422675
500-141780-1 MS	2490V2-3-B12 (0-5)	Total/NA	Solid	9014	422675
500-141780-1 MSD	2490V2-3-B12 (0-5)	Total/NA	Solid	9014	422675

## Analysis Batch: 423199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-1	2490V2-3-B12 (0-5)	Total/NA	Solid	9045D	
500-141780-2	2490V2-3-B12 (5-10)	Total/NA	Solid	9045D	

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# QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## General Chemistry (Continued)

### Analysis Batch: 423199 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-141780-3	2490V2-3-B12 (10-15)	Total/NA	Solid	9045D	
500-141780-4	2490V2-3-B13 (0-5)	Total/NA	Solid	9045D	
500-141780-5	2490V2-3-B14 (0-5)	Total/NA	Solid	9045D	
500-141780-6	2490V2-3-B15 (0-5)	Total/NA	Solid	9045D	
500-141780-7	2490V2-3-B19 (0-5)	Total/NA	Solid	9045D	
500-141780-8	2490V2-3-B20 (0-5)	Total/NA	Solid	9045D	
500-141780-9	2490V2-3-B21 (0-5)	Total/NA	Solid	9045D	
500-141780-10	2490V2-3-B22 (0-5)	Total/NA	Solid	9045D	
500-141780-11	2490V2-3-B23 (0-5)	Total/NA	Solid	9045D	
500-141780-12	2490V2-3-B24 (0-5)	Total/NA	Solid	9045D	
500-141780-13	2490V2-3-B24 (0-5) Dup	Total/NA	Solid	9045D	
500-141780-14	2490V2-3-B25 (0-5)	Total/NA	Solid	9045D	
500-141780-15	2490V2-3-B26 (0-5)	Total/NA	Solid	9045D	
500-141780-16	2490V2-3-B27 (0-5)	Total/NA	Solid	9045D	
500-141780-17	2490V2-3-B28 (0-5)	Total/NA	Solid	9045D	
500-141780-18	2490V2-3-B29 (0-5)	Total/NA	Solid	9045D	
500-141780-19	2490V2-3-B29 (5-10)	Total/NA	Solid	9045D	
500-141780-20	2490V2-3-B30 (0-5)	Total/NA	Solid	9045D	
500-141780-21	2490V2-3-B30 (5-10)	Total/NA	Solid	9045D	
500-141780-22	2490V2-3-B31 (0-5)	Total/NA	Solid	9045D	
500-141780-23	2490V2-3-B31 (5-10)	Total/NA	Solid	9045D	
500-141780-1 DU	2490V2-3-B12 (0-5)	Total/NA	Solid	9045D	
500-141780-22 DU	2490V2-3-B31 (0-5)	Total/NA	Solid	9045D	

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-141780-1	2490V2-3-B12 (0-5)	89	92	90	97
500-141780-2	2490V2-3-B12 (5-10)	90	91	90	100
500-141780-3	2490V2-3-B12 (10-15)	91	93	90	102
500-141780-4	2490V2-3-B13 (0-5)	88	93	90	97
500-141780-5	2490V2-3-B14 (0-5)	87	93	89	98
500-141780-6	2490V2-3-B15 (0-5)	88	92	87	98
500-141780-7	2490V2-3-B19 (0-5)	87	91	89	100
500-141780-8	2490V2-3-B20 (0-5)	85	93	85	99
500-141780-9	2490V2-3-B21 (0-5)	86	91	86	99
500-141780-10	2490V2-3-B22 (0-5)	87	94	88	97
500-141780-11	2490V2-3-B23 (0-5)	85	94	85	98
500-141780-12	2490V2-3-B24 (0-5)	90	89	87	98
500-141780-13	2490V2-3-B24 (0-5) Dup	92	90	85	98
500-141780-14	2490V2-3-B25 (0-5)	88	91	87	99
500-141780-15	2490V2-3-B26 (0-5)	86	93	88	99
500-141780-16	2490V2-3-B27 (0-5)	87	92	86	98
500-141780-17	2490V2-3-B28 (0-5)	86	92	88	97
500-141780-18	2490V2-3-B29 (0-5)	88	89	90	98
500-141780-19	2490V2-3-B29 (5-10)	90	92	89	98
500-141780-20	2490V2-3-B30 (0-5)	89	93	90	98
500-141780-21	2490V2-3-B30 (5-10)	87	92	88	98
500-141780-22	2490V2-3-B31 (0-5)	89	91	88	100
500-141780-23	2490V2-3-B31 (5-10)	86	94	91	98
LCS 500-422684/29	Lab Control Sample	87	89	80	101
LCS 500-422818/4	Lab Control Sample	91	87	79	100
LCSD 500-422684/4	Lab Control Sample Dup	87	87	80	101
MB 500-422684/5	Method Blank	86	90	80	100
MB 500-422818/5	Method Blank	92	86	82	99

### Surrogate Legend

- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane
- DCA = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (44-121)	2FP (46-133)	NBZ (41-120)	PHL (46-125)	TPHL (35-160)	TBP (25-139)
500-141780-1	2490V2-3-B12 (0-5)	98	93	88	94	81	118
500-141780-1 MS	2490V2-3-B12 (0-5)	99	96	90	89	88	137
500-141780-1 MSD	2490V2-3-B12 (0-5)	96	94	86	86	81	131
500-141780-2	2490V2-3-B12 (5-10)	91	89	84	90	76	114
500-141780-3	2490V2-3-B12 (10-15)	96	95	88	87	81	92
500-141780-4	2490V2-3-B13 (0-5)	103	106	93	102	88	146 X
500-141780-5	2490V2-3-B14 (0-5)	95	91	89	92	84	122
500-141780-6	2490V2-3-B15 (0-5)	104	94	87	96	82	126

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# Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (44-121)	2FP (46-133)	NBZ (41-120)	PHL (46-125)	TPHL (35-160)	TBP (25-139)
500-141780-7	2490V2-3-B19 (0-5)	98	101	91	96	84	108
500-141780-8	2490V2-3-B20 (0-5)	92	96	86	85	80	99
500-141780-9	2490V2-3-B21 (0-5)	94	95	90	96	79	108
500-141780-10	2490V2-3-B22 (0-5)	95	98	90	94	81	121
500-141780-11	2490V2-3-B23 (0-5)	99	101	91	95	78	125
500-141780-12	2490V2-3-B24 (0-5)	97	101	95	100	80	116
500-141780-13	2490V2-3-B24 (0-5) Dup	99	100	92	99	80	113
500-141780-14	2490V2-3-B25 (0-5)	91	94	86	88	77	103
500-141780-15	2490V2-3-B26 (0-5)	96	97	89	94	77	98
500-141780-16	2490V2-3-B27 (0-5)	96	99	91	99	77	112
500-141780-17	2490V2-3-B28 (0-5)	99	99	93	100	81	110
500-141780-18	2490V2-3-B29 (0-5)	99	97	90	90	79	112
500-141780-19	2490V2-3-B29 (5-10)	98	96	94	94	81	97
500-141780-20	2490V2-3-B30 (0-5)	101	103	94	102	81	123
500-141780-21	2490V2-3-B30 (5-10)	120	138 X	113	136 X	96	96
500-141780-21 MS	2490V2-3-B30 (5-10)	102	116	97	116	83	79
500-141780-21 MSD	2490V2-3-B30 (5-10)	94	106	90	104	78	65
500-141780-22	2490V2-3-B31 (0-5)	93	107	88	107	77	70
500-141780-23	2490V2-3-B31 (5-10)	97	109	89	102	80	75
LCS 500-422599/2-A	Lab Control Sample	94	99	95	100	91	87
LCS 500-422624/2-A	Lab Control Sample	98	127	92	108	92	96
MB 500-422599/1-A	Method Blank	87	96	86	95	92	73
MB 500-422624/1-A	Method Blank	98	136 X	78	112	105	86

### Surrogate Legend

- FBP = 2-Fluorobiphenyl
- 2FP = 2-Fluorophenol
- NBZ = Nitrobenzene-d5
- PHL = Phenol-d5
- TPHL = Terphenyl-d14
- TBP = 2,4,6-Tribromophenol

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-422684/5**

**Matrix: Solid**

**Analysis Batch: 422684**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			03/08/18 13:05	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			03/08/18 13:05	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			03/08/18 13:05	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			03/08/18 13:05	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			03/08/18 13:05	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			03/08/18 13:05	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			03/08/18 13:05	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			03/08/18 13:05	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			03/08/18 13:05	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			03/08/18 13:05	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			03/08/18 13:05	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			03/08/18 13:05	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			03/08/18 13:05	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			03/08/18 13:05	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			03/08/18 13:05	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			03/08/18 13:05	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			03/08/18 13:05	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			03/08/18 13:05	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			03/08/18 13:05	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			03/08/18 13:05	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			03/08/18 13:05	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			03/08/18 13:05	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			03/08/18 13:05	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			03/08/18 13:05	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			03/08/18 13:05	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			03/08/18 13:05	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			03/08/18 13:05	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/08/18 13:05	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			03/08/18 13:05	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			03/08/18 13:05	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			03/08/18 13:05	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			03/08/18 13:05	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			03/08/18 13:05	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/08/18 13:05	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			03/08/18 13:05	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			03/08/18 13:05	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			03/08/18 13:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131		03/08/18 13:05	1
Dibromofluoromethane	90		75 - 126		03/08/18 13:05	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 134		03/08/18 13:05	1
Toluene-d8 (Surr)	100		75 - 124		03/08/18 13:05	1

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422684/29**

**Matrix: Solid**

**Analysis Batch: 422684**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0485		mg/Kg		97	40 - 150
Benzene	0.0500	0.0531		mg/Kg		106	70 - 125
Bromodichloromethane	0.0500	0.0474		mg/Kg		95	67 - 129
Bromoform	0.0500	0.0452		mg/Kg		90	68 - 136
Bromomethane	0.0500	0.0403		mg/Kg		81	70 - 130
2-Butanone (MEK)	0.0500	0.0492		mg/Kg		98	47 - 138
Carbon disulfide	0.0500	0.0597		mg/Kg		119	70 - 129
Carbon tetrachloride	0.0500	0.0496		mg/Kg		99	75 - 125
Chlorobenzene	0.0500	0.0514		mg/Kg		103	50 - 150
Chloroethane	0.0500	0.0265	*	mg/Kg		53	75 - 125
Chloroform	0.0500	0.0508		mg/Kg		102	57 - 135
Chloromethane	0.0500	0.0517		mg/Kg		103	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0545		mg/Kg		109	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0492		mg/Kg		98	70 - 125
Dibromochloromethane	0.0500	0.0458		mg/Kg		92	69 - 125
1,1-Dichloroethane	0.0500	0.0498		mg/Kg		100	70 - 125
1,2-Dichloroethane	0.0500	0.0462		mg/Kg		92	70 - 130
1,1-Dichloroethene	0.0500	0.0586		mg/Kg		117	70 - 120
1,2-Dichloropropane	0.0500	0.0492		mg/Kg		98	70 - 125
Ethylbenzene	0.0500	0.0525		mg/Kg		105	61 - 136
2-Hexanone	0.0500	0.0418		mg/Kg		84	48 - 146
Methylene Chloride	0.0500	0.0525		mg/Kg		105	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0431		mg/Kg		86	50 - 148
Methyl tert-butyl ether	0.0500	0.0485		mg/Kg		97	50 - 140
Styrene	0.0500	0.0493		mg/Kg		99	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0470		mg/Kg		94	70 - 122
Tetrachloroethene	0.0500	0.0557		mg/Kg		111	70 - 124
Toluene	0.0500	0.0540		mg/Kg		108	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0579		mg/Kg		116	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0466		mg/Kg		93	70 - 125
1,1,1-Trichloroethane	0.0500	0.0539		mg/Kg		108	70 - 128
1,1,2-Trichloroethane	0.0500	0.0489		mg/Kg		98	70 - 125
Trichloroethene	0.0500	0.0522		mg/Kg		104	70 - 125
Vinyl acetate	0.0500	0.0513		mg/Kg		103	40 - 153
Vinyl chloride	0.0500	0.0579		mg/Kg		116	70 - 125
Xylenes, Total	0.100	0.108		mg/Kg		108	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	87		75 - 131
Dibromofluoromethane	89		75 - 126
1,2-Dichloroethane-d4 (Surr)	80		70 - 134
Toluene-d8 (Surr)	101		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-422684/4

Matrix: Solid

Analysis Batch: 422684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0470		mg/Kg		94	40 - 150	3	30
Benzene	0.0500	0.0473		mg/Kg		95	70 - 125	12	30
Bromodichloromethane	0.0500	0.0428		mg/Kg		86	67 - 129	10	30
Bromoform	0.0500	0.0399		mg/Kg		80	68 - 136	12	30
Bromomethane	0.0500	0.0406		mg/Kg		81	70 - 130	1	30
2-Butanone (MEK)	0.0500	0.0479		mg/Kg		96	47 - 138	3	30
Carbon disulfide	0.0500	0.0528		mg/Kg		106	70 - 129	12	30
Carbon tetrachloride	0.0500	0.0436		mg/Kg		87	75 - 125	13	30
Chlorobenzene	0.0500	0.0463		mg/Kg		93	50 - 150	10	30
Chloroethane	0.0500	0.0271	*	mg/Kg		54	75 - 125	2	30
Chloroform	0.0500	0.0451		mg/Kg		90	57 - 135	12	30
Chloromethane	0.0500	0.0520		mg/Kg		104	70 - 125	1	30
cis-1,2-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 125	10	30
cis-1,3-Dichloropropene	0.0500	0.0446		mg/Kg		89	70 - 125	10	30
Dibromochloromethane	0.0500	0.0391		mg/Kg		78	69 - 125	16	30
1,1-Dichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125	8	30
1,2-Dichloroethane	0.0500	0.0420		mg/Kg		84	70 - 130	10	30
1,1-Dichloroethene	0.0500	0.0522		mg/Kg		104	70 - 120	12	30
1,2-Dichloropropane	0.0500	0.0445		mg/Kg		89	70 - 125	10	30
Ethylbenzene	0.0500	0.0465		mg/Kg		93	61 - 136	12	30
2-Hexanone	0.0500	0.0415		mg/Kg		83	48 - 146	1	30
Methylene Chloride	0.0500	0.0479		mg/Kg		96	70 - 126	9	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0434		mg/Kg		87	50 - 148	1	30
Methyl tert-butyl ether	0.0500	0.0429		mg/Kg		86	50 - 140	12	30
Styrene	0.0500	0.0451		mg/Kg		90	70 - 125	9	30
1,1,1,2-Tetrachloroethane	0.0500	0.0413		mg/Kg		83	70 - 122	13	30
Tetrachloroethene	0.0500	0.0496		mg/Kg		99	70 - 124	12	30
Toluene	0.0500	0.0482		mg/Kg		96	70 - 125	11	30
trans-1,2-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 125	14	30
trans-1,3-Dichloropropene	0.0500	0.0418		mg/Kg		84	70 - 125	11	30
1,1,1-Trichloroethane	0.0500	0.0482		mg/Kg		96	70 - 128	11	30
1,1,2-Trichloroethane	0.0500	0.0435		mg/Kg		87	70 - 125	12	30
Trichloroethene	0.0500	0.0456		mg/Kg		91	70 - 125	13	30
Vinyl acetate	0.0500	0.0482		mg/Kg		96	40 - 153	6	30
Vinyl chloride	0.0500	0.0600		mg/Kg		120	70 - 125	4	30
Xylenes, Total	0.100	0.0973		mg/Kg		97	53 - 147	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	87		75 - 131
Dibromofluoromethane	87		75 - 126
1,2-Dichloroethane-d4 (Surr)	80		70 - 134
Toluene-d8 (Surr)	101		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422818/5**

**Matrix: Solid**

**Analysis Batch: 422818**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			03/09/18 10:23	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			03/09/18 10:23	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			03/09/18 10:23	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			03/09/18 10:23	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			03/09/18 10:23	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			03/09/18 10:23	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			03/09/18 10:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			03/09/18 10:23	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			03/09/18 10:23	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			03/09/18 10:23	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			03/09/18 10:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			03/09/18 10:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			03/09/18 10:23	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			03/09/18 10:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			03/09/18 10:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			03/09/18 10:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			03/09/18 10:23	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			03/09/18 10:23	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			03/09/18 10:23	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			03/09/18 10:23	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			03/09/18 10:23	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			03/09/18 10:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			03/09/18 10:23	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			03/09/18 10:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			03/09/18 10:23	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/09/18 10:23	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			03/09/18 10:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			03/09/18 10:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			03/09/18 10:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			03/09/18 10:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			03/09/18 10:23	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			03/09/18 10:23	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			03/09/18 10:23	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			03/09/18 10:23	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			03/09/18 10:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131		03/09/18 10:23	1
Dibromofluoromethane	86		75 - 126		03/09/18 10:23	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134		03/09/18 10:23	1
Toluene-d8 (Surr)	99		75 - 124		03/09/18 10:23	1

TestAmerica Chicago



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422818/4**

**Matrix: Solid**

**Analysis Batch: 422818**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0453		mg/Kg		91	40 - 150
Benzene	0.0500	0.0525		mg/Kg		105	70 - 125
Bromodichloromethane	0.0500	0.0485		mg/Kg		97	67 - 129
Bromoform	0.0500	0.0428		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0348		mg/Kg		70	70 - 130
2-Butanone (MEK)	0.0500	0.0484		mg/Kg		97	47 - 138
Carbon disulfide	0.0500	0.0560		mg/Kg		112	70 - 129
Carbon tetrachloride	0.0500	0.0476		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0505		mg/Kg		101	50 - 150
Chloroethane	0.0500	0.0289	*	mg/Kg		58	75 - 125
Chloroform	0.0500	0.0508		mg/Kg		102	57 - 135
Chloromethane	0.0500	0.0473		mg/Kg		95	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0516		mg/Kg		103	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0499		mg/Kg		100	70 - 125
Dibromochloromethane	0.0500	0.0448		mg/Kg		90	69 - 125
1,1-Dichloroethane	0.0500	0.0481		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0465		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.0556		mg/Kg		111	70 - 120
1,2-Dichloropropane	0.0500	0.0507		mg/Kg		101	70 - 125
Ethylbenzene	0.0500	0.0502		mg/Kg		100	61 - 136
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
Methylene Chloride	0.0500	0.0509		mg/Kg		102	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0434		mg/Kg		87	50 - 148
Methyl tert-butyl ether	0.0500	0.0444		mg/Kg		89	50 - 140
Styrene	0.0500	0.0478		mg/Kg		96	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0461		mg/Kg		92	70 - 122
Tetrachloroethene	0.0500	0.0545		mg/Kg		109	70 - 124
Toluene	0.0500	0.0534		mg/Kg		107	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0542		mg/Kg		108	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0491		mg/Kg		98	70 - 125
1,1,1-Trichloroethane	0.0500	0.0518		mg/Kg		104	70 - 128
1,1,2-Trichloroethane	0.0500	0.0496		mg/Kg		99	70 - 125
Trichloroethene	0.0500	0.0517		mg/Kg		103	70 - 125
Vinyl acetate	0.0500	0.0480		mg/Kg		96	40 - 153
Vinyl chloride	0.0500	0.0528		mg/Kg		106	70 - 125
Xylenes, Total	0.100	0.103		mg/Kg		103	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	87		75 - 126
1,2-Dichloroethane-d4 (Surr)	79		70 - 134
Toluene-d8 (Surr)	100		75 - 124

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-422599/1-A

Matrix: Solid

Analysis Batch: 422661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Carbazole	<0.17		0.17	0.083	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Isophorone	<0.17		0.17	0.037	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		03/07/18 17:47	03/08/18 12:11	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422599/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Phenol	<0.17		0.17	0.074	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		03/07/18 17:47	03/08/18 12:11	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		03/07/18 17:47	03/08/18 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		44 - 121	03/07/18 17:47	03/08/18 12:11	1
2-Fluorophenol	96		46 - 133	03/07/18 17:47	03/08/18 12:11	1
Nitrobenzene-d5	86		41 - 120	03/07/18 17:47	03/08/18 12:11	1
Phenol-d5	95		46 - 125	03/07/18 17:47	03/08/18 12:11	1
Terphenyl-d14	92		35 - 160	03/07/18 17:47	03/08/18 12:11	1
2,4,6-Tribromophenol	73		25 - 139	03/07/18 17:47	03/08/18 12:11	1

**Lab Sample ID: LCS 500-422599/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.33	1.22		mg/Kg		91	58 - 110
Acenaphthylene	1.33	1.29		mg/Kg		97	60 - 110
Anthracene	1.33	1.28		mg/Kg		96	63 - 110
Benzo[a]anthracene	1.33	1.26		mg/Kg		94	63 - 110
Benzo[a]pyrene	1.33	1.19		mg/Kg		89	61 - 120
Benzo[b]fluoranthene	1.33	1.18		mg/Kg		88	62 - 120
Benzo[g,h,i]perylene	1.33	1.29		mg/Kg		97	64 - 120
Benzo[k]fluoranthene	1.33	1.22		mg/Kg		91	65 - 120
Bis(2-chloroethoxy)methane	1.33	1.19		mg/Kg		89	60 - 112
Bis(2-chloroethyl)ether	1.33	1.16		mg/Kg		87	55 - 111
Bis(2-ethylhexyl) phthalate	1.33	1.23		mg/Kg		92	63 - 118
4-Bromophenyl phenyl ether	1.33	1.26		mg/Kg		95	63 - 110
Butyl benzyl phthalate	1.33	1.25		mg/Kg		94	61 - 116
Carbazole	1.33	1.61		mg/Kg		121	59 - 158
4-Chloroaniline	1.33	1.06		mg/Kg		80	30 - 150
4-Chloro-3-methylphenol	1.33	1.15		mg/Kg		86	61 - 114
2-Chloronaphthalene	1.33	1.21		mg/Kg		90	64 - 110
2-Chlorophenol	1.33	1.24		mg/Kg		93	64 - 110

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422599/2-A**

**Matrix: Solid**

**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorophenyl phenyl ether	1.33	1.24		mg/Kg		93	63 - 110
Chrysene	1.33	1.29		mg/Kg		97	63 - 120
Dibenz(a,h)anthracene	1.33	1.21		mg/Kg		91	64 - 119
Dibenzofuran	1.33	1.19		mg/Kg		90	64 - 110
1,2-Dichlorobenzene	1.33	1.15		mg/Kg		86	62 - 110
1,3-Dichlorobenzene	1.33	1.12		mg/Kg		84	60 - 110
1,4-Dichlorobenzene	1.33	1.15		mg/Kg		86	61 - 110
3,3'-Dichlorobenzidine	1.33	1.18		mg/Kg		89	49 - 112
2,4-Dichlorophenol	1.33	1.22		mg/Kg		91	58 - 120
Diethyl phthalate	1.33	1.25		mg/Kg		94	58 - 120
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	60 - 110
Dimethyl phthalate	1.33	1.20		mg/Kg		90	64 - 110
Di-n-butyl phthalate	1.33	1.26		mg/Kg		95	65 - 120
4,6-Dinitro-2-methylphenol	2.67	1.61		mg/Kg		60	10 - 110
2,4-Dinitrophenol	2.67	1.00		mg/Kg		37	10 - 100
2,4-Dinitrotoluene	1.33	1.14		mg/Kg		86	62 - 117
2,6-Dinitrotoluene	1.33	1.17		mg/Kg		87	67 - 120
Di-n-octyl phthalate	1.33	1.26		mg/Kg		95	63 - 119
Fluoranthene	1.33	1.31		mg/Kg		98	62 - 120
Fluorene	1.33	1.22		mg/Kg		91	62 - 120
Hexachlorobenzene	1.33	1.35		mg/Kg		101	55 - 117
Hexachlorobutadiene	1.33	1.18		mg/Kg		89	56 - 120
Hexachlorocyclopentadiene	1.33	0.939		mg/Kg		70	10 - 106
Hexachloroethane	1.33	1.11		mg/Kg		83	61 - 110
Indeno[1,2,3-cd]pyrene	1.33	1.22		mg/Kg		91	57 - 127
Isophorone	1.33	1.08		mg/Kg		81	55 - 110
2-Methylnaphthalene	1.33	1.23		mg/Kg		92	62 - 110
2-Methylphenol	1.33	1.18		mg/Kg		89	60 - 120
3 & 4 Methylphenol	1.33	1.18		mg/Kg		88	57 - 120
Naphthalene	1.33	1.20		mg/Kg		90	63 - 110
2-Nitroaniline	1.33	1.12		mg/Kg		84	57 - 124
3-Nitroaniline	1.33	0.982		mg/Kg		74	40 - 122
4-Nitroaniline	1.33	1.22		mg/Kg		92	60 - 160
Nitrobenzene	1.33	1.19		mg/Kg		89	60 - 116
2-Nitrophenol	1.33	1.19		mg/Kg		89	60 - 120
4-Nitrophenol	2.67	2.23		mg/Kg		83	30 - 122
N-Nitrosodi-n-propylamine	1.33	1.17		mg/Kg		88	56 - 118
N-Nitrosodiphenylamine	1.33	1.37		mg/Kg		102	65 - 112
2,2'-oxybis[1-chloropropane]	1.33	0.990		mg/Kg		74	40 - 124
Pentachlorophenol	2.67	2.18		mg/Kg		82	13 - 112
Phenanthrene	1.33	1.25		mg/Kg		94	62 - 120
Phenol	1.33	1.18		mg/Kg		89	56 - 122
Pyrene	1.33	1.28		mg/Kg		96	63 - 120
1,2,4-Trichlorobenzene	1.33	1.23		mg/Kg		92	62 - 110
2,4,5-Trichlorophenol	1.33	1.23		mg/Kg		92	50 - 120
2,4,6-Trichlorophenol	1.33	1.25		mg/Kg		93	57 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422599/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422661**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	94		44 - 121
2-Fluorophenol	99		46 - 133
Nitrobenzene-d5	95		41 - 120
Phenol-d5	100		46 - 125
Terphenyl-d14	91		35 - 160
2,4,6-Tribromophenol	87		25 - 139

**Lab Sample ID: 500-141780-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 422679**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422599**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	<0.038		1.51	1.54		mg/Kg	☼	102	58 - 110
Acenaphthylene	<0.038		1.51	1.52		mg/Kg	☼	101	60 - 110
Anthracene	<0.038		1.51	1.48		mg/Kg	☼	98	63 - 110
Benzo[a]anthracene	<0.038		1.51	1.48		mg/Kg	☼	98	63 - 110
Benzo[a]pyrene	<0.038		1.51	1.44		mg/Kg	☼	95	61 - 120
Benzo[b]fluoranthene	<0.038	F1	1.51	1.85	F1	mg/Kg	☼	122	62 - 120
Benzo[g,h,i]perylene	<0.038	F1	1.51	0.736	F1	mg/Kg	☼	49	64 - 120
Benzo[k]fluoranthene	<0.038		1.51	1.77		mg/Kg	☼	118	65 - 120
Bis(2-chloroethoxy)methane	<0.19		1.51	1.51		mg/Kg	☼	100	60 - 112
Bis(2-chloroethyl)ether	<0.19	F2	1.51	1.51		mg/Kg	☼	100	55 - 111
Bis(2-ethylhexyl) phthalate	<0.19		1.51	1.49		mg/Kg	☼	99	63 - 118
4-Bromophenyl phenyl ether	<0.19		1.51	1.41		mg/Kg	☼	94	63 - 110
Butyl benzyl phthalate	<0.19		1.51	1.38		mg/Kg	☼	92	61 - 116
Carbazole	<0.19		1.51	1.62		mg/Kg	☼	107	59 - 158
4-Chloroaniline	<0.76		1.51	1.13		mg/Kg	☼	75	30 - 150
4-Chloro-3-methylphenol	<0.38		1.51	1.42		mg/Kg	☼	94	61 - 114
2-Chloronaphthalene	<0.19		1.51	1.49		mg/Kg	☼	99	64 - 110
2-Chlorophenol	<0.19		1.51	1.52		mg/Kg	☼	101	64 - 110
4-Chlorophenyl phenyl ether	<0.19		1.51	1.46		mg/Kg	☼	97	63 - 110
Chrysene	<0.038		1.51	1.35		mg/Kg	☼	90	63 - 120
Dibenz(a,h)anthracene	<0.038	F1	1.51	0.911	F1	mg/Kg	☼	60	64 - 119
Dibenzofuran	<0.19		1.51	1.46		mg/Kg	☼	97	64 - 110
1,2-Dichlorobenzene	<0.19		1.51	1.38		mg/Kg	☼	91	62 - 110
1,3-Dichlorobenzene	<0.19		1.51	1.35		mg/Kg	☼	89	60 - 110
1,4-Dichlorobenzene	<0.19		1.51	1.39		mg/Kg	☼	92	61 - 110
3,3'-Dichlorobenzidine	<0.19		1.51	1.08		mg/Kg	☼	71	49 - 112
2,4-Dichlorophenol	<0.38		1.51	1.47		mg/Kg	☼	97	58 - 120
Diethyl phthalate	<0.19		1.51	1.53		mg/Kg	☼	101	58 - 120
2,4-Dimethylphenol	<0.38		1.51	1.41		mg/Kg	☼	93	60 - 110
Dimethyl phthalate	<0.19		1.51	1.43		mg/Kg	☼	94	64 - 110
Di-n-butyl phthalate	<0.19		1.51	1.48		mg/Kg	☼	98	65 - 120
4,6-Dinitro-2-methylphenol	<0.76	F2	3.02	0.524	J	mg/Kg	☼	17	10 - 110
2,4-Dinitrophenol	<0.76	F1	3.02	<0.76	F1	mg/Kg	☼	0	10 - 100
2,4-Dinitrotoluene	<0.19		1.51	1.42		mg/Kg	☼	94	62 - 117
2,6-Dinitrotoluene	<0.19		1.51	1.50		mg/Kg	☼	99	67 - 120
Di-n-octyl phthalate	<0.19		1.51	1.54		mg/Kg	☼	102	63 - 119

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-141780-21 MS**

**Matrix: Solid**

**Analysis Batch: 422679**

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluoranthene	<0.038		1.51	1.49		mg/Kg	☼	99		62 - 120
Fluorene	<0.038		1.51	1.52		mg/Kg	☼	101		62 - 120
Hexachlorobenzene	<0.076		1.51	1.32		mg/Kg	☼	87		55 - 117
Hexachlorobutadiene	<0.19		1.51	1.36		mg/Kg	☼	90		56 - 120
Hexachlorocyclopentadiene	<0.76	F1	1.51	<0.76	F1	mg/Kg	☼	0		10 - 106
Hexachloroethane	<0.19		1.51	1.18		mg/Kg	☼	78		61 - 110
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.51	0.867		mg/Kg	☼	57		57 - 127
Isophorone	<0.19		1.51	1.29		mg/Kg	☼	85		55 - 110
2-Methylnaphthalene	<0.076		1.51	1.55		mg/Kg	☼	103		62 - 110
2-Methylphenol	<0.19		1.51	1.52		mg/Kg	☼	101		60 - 120
3 & 4 Methylphenol	<0.19		1.51	1.61		mg/Kg	☼	107		57 - 120
Naphthalene	<0.038		1.51	1.42		mg/Kg	☼	94		63 - 110
2-Nitroaniline	<0.19		1.51	1.57		mg/Kg	☼	104		57 - 124
3-Nitroaniline	<0.38		1.51	1.29		mg/Kg	☼	85		40 - 122
4-Nitroaniline	<0.38		1.51	1.46		mg/Kg	☼	96		60 - 160
Nitrobenzene	<0.038		1.51	1.46		mg/Kg	☼	97		60 - 116
2-Nitrophenol	<0.38		1.51	1.45		mg/Kg	☼	96		60 - 120
4-Nitrophenol	<0.76		3.02	2.01		mg/Kg	☼	67		30 - 122
N-Nitrosodi-n-propylamine	<0.076		1.51	1.53		mg/Kg	☼	101		56 - 118
N-Nitrosodiphenylamine	<0.19		1.51	1.50		mg/Kg	☼	99		65 - 112
2,2'-oxybis[1-chloropropane]	<0.19		1.51	1.55		mg/Kg	☼	102		40 - 124
Pentachlorophenol	<0.76	F2	3.02	1.22		mg/Kg	☼	40		13 - 112
Phenanthrene	<0.038		1.51	1.47		mg/Kg	☼	98		62 - 120
Phenol	<0.19		1.51	1.67		mg/Kg	☼	110		56 - 122
Pyrene	<0.038		1.51	1.44		mg/Kg	☼	95		63 - 120
1,2,4-Trichlorobenzene	<0.19		1.51	1.40		mg/Kg	☼	93		62 - 110
2,4,5-Trichlorophenol	<0.38		1.51	1.65		mg/Kg	☼	109		50 - 120
2,4,6-Trichlorophenol	<0.38		1.51	1.32		mg/Kg	☼	87		57 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	102		44 - 121
2-Fluorophenol	116		46 - 133
Nitrobenzene-d5	97		41 - 120
Phenol-d5	116		46 - 125
Terphenyl-d14	83		35 - 160
2,4,6-Tribromophenol	79		25 - 139

**Lab Sample ID: 500-141780-21 MSD**

**Matrix: Solid**

**Analysis Batch: 422679**

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Acenaphthene	<0.038		1.51	1.42		mg/Kg	☼	94		58 - 110	8	30
Acenaphthylene	<0.038		1.51	1.39		mg/Kg	☼	92		60 - 110	9	30
Anthracene	<0.038		1.51	1.35		mg/Kg	☼	89		63 - 110	9	30
Benzo[a]anthracene	<0.038		1.51	1.35		mg/Kg	☼	89		63 - 110	9	30
Benzo[a]pyrene	<0.038		1.51	1.33		mg/Kg	☼	88		61 - 120	8	30
Benzo[b]fluoranthene	<0.038	F1	1.51	1.76		mg/Kg	☼	116		62 - 120	5	30

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-141780-21 MSD**

**Matrix: Solid**

**Analysis Batch: 422679**

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Benzo[g,h,i]perylene	<0.038	F1	1.51	0.675	F1	mg/Kg	☼	45	64 - 120	9	30
Benzo[k]fluoranthene	<0.038		1.51	1.60		mg/Kg	☼	106	65 - 120	10	30
Bis(2-chloroethoxy)methane	<0.19		1.51	1.41		mg/Kg	☼	93	60 - 112	7	30
Bis(2-chloroethyl)ether	<0.19	F2	1.51	1.04	F2	mg/Kg	☼	68	55 - 111	37	30
Bis(2-ethylhexyl) phthalate	<0.19		1.51	1.38		mg/Kg	☼	91	63 - 118	8	30
4-Bromophenyl phenyl ether	<0.19		1.51	1.30		mg/Kg	☼	86	63 - 110	9	30
Butyl benzyl phthalate	<0.19		1.51	1.28		mg/Kg	☼	84	61 - 116	8	30
Carbazole	<0.19		1.51	1.48		mg/Kg	☼	98	59 - 158	9	30
4-Chloroaniline	<0.76		1.51	1.03		mg/Kg	☼	68	30 - 150	9	30
4-Chloro-3-methylphenol	<0.38		1.51	1.36		mg/Kg	☼	90	61 - 114	4	30
2-Chloronaphthalene	<0.19		1.51	1.36		mg/Kg	☼	90	64 - 110	9	30
2-Chlorophenol	<0.19		1.51	1.38		mg/Kg	☼	91	64 - 110	10	30
4-Chlorophenyl phenyl ether	<0.19		1.51	1.35		mg/Kg	☼	89	63 - 110	8	30
Chrysene	<0.038		1.51	1.24		mg/Kg	☼	82	63 - 120	9	30
Dibenz(a,h)anthracene	<0.038	F1	1.51	0.844	F1	mg/Kg	☼	56	64 - 119	8	30
Dibenzofuran	<0.19		1.51	1.35		mg/Kg	☼	89	64 - 110	8	30
1,2-Dichlorobenzene	<0.19		1.51	1.27		mg/Kg	☼	84	62 - 110	8	30
1,3-Dichlorobenzene	<0.19		1.51	1.26		mg/Kg	☼	83	60 - 110	6	30
1,4-Dichlorobenzene	<0.19		1.51	1.28		mg/Kg	☼	84	61 - 110	8	30
3,3'-Dichlorobenzidine	<0.19		1.51	1.03		mg/Kg	☼	68	49 - 112	4	30
2,4-Dichlorophenol	<0.38		1.51	1.34		mg/Kg	☼	88	58 - 120	9	30
Diethyl phthalate	<0.19		1.51	1.41		mg/Kg	☼	93	58 - 120	8	30
2,4-Dimethylphenol	<0.38		1.51	1.29		mg/Kg	☼	85	60 - 110	8	30
Dimethyl phthalate	<0.19		1.51	1.28		mg/Kg	☼	85	64 - 110	11	30
Di-n-butyl phthalate	<0.19		1.51	1.36		mg/Kg	☼	90	65 - 120	9	30
4,6-Dinitro-2-methylphenol	<0.76	F2	3.03	0.328	J F2	mg/Kg	☼	11	10 - 110	46	30
2,4-Dinitrophenol	<0.76	F1	3.03	<0.76	F1	mg/Kg	☼	0	10 - 100	NC	30
2,4-Dinitrotoluene	<0.19		1.51	1.31		mg/Kg	☼	87	62 - 117	8	30
2,6-Dinitrotoluene	<0.19		1.51	1.39		mg/Kg	☼	92	67 - 120	8	30
Di-n-octyl phthalate	<0.19		1.51	1.43		mg/Kg	☼	94	63 - 119	8	30
Fluoranthene	<0.038		1.51	1.38		mg/Kg	☼	91	62 - 120	7	30
Fluorene	<0.038		1.51	1.39		mg/Kg	☼	92	62 - 120	9	30
Hexachlorobenzene	<0.076		1.51	1.20		mg/Kg	☼	79	55 - 117	10	30
Hexachlorobutadiene	<0.19		1.51	1.26		mg/Kg	☼	83	56 - 120	7	30
Hexachlorocyclopentadiene	<0.76	F1	1.51	<0.76	F1	mg/Kg	☼	0	10 - 106	NC	30
Hexachloroethane	<0.19		1.51	1.12		mg/Kg	☼	74	61 - 110	5	30
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.51	0.797	F1	mg/Kg	☼	53	57 - 127	8	30
Isophorone	<0.19		1.51	1.20		mg/Kg	☼	79	55 - 110	8	30
2-Methylnaphthalene	<0.076		1.51	1.49		mg/Kg	☼	98	62 - 110	4	30
2-Methylphenol	<0.19		1.51	1.36		mg/Kg	☼	90	60 - 120	11	30
3 & 4 Methylphenol	<0.19		1.51	1.44		mg/Kg	☼	95	57 - 120	12	30
Naphthalene	<0.038		1.51	1.32		mg/Kg	☼	87	63 - 110	8	30
2-Nitroaniline	<0.19		1.51	1.43		mg/Kg	☼	95	57 - 124	9	30
3-Nitroaniline	<0.38		1.51	1.15		mg/Kg	☼	76	40 - 122	11	30
4-Nitroaniline	<0.38		1.51	1.38		mg/Kg	☼	91	60 - 160	6	30
Nitrobenzene	<0.038		1.51	1.35		mg/Kg	☼	89	60 - 116	7	30
2-Nitrophenol	<0.38		1.51	1.33		mg/Kg	☼	88	60 - 120	9	30
4-Nitrophenol	<0.76		3.03	1.86		mg/Kg	☼	61	30 - 122	8	30

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-141780-21 MSD**

**Matrix: Solid**

**Analysis Batch: 422679**

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Prep Type: Total/NA**

**Prep Batch: 422599**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
N-Nitrosodi-n-propylamine	<0.076		1.51	1.38		mg/Kg	☼	91	56 - 118	10	30
N-Nitrosodiphenylamine	<0.19		1.51	1.38		mg/Kg	☼	91	65 - 112	8	30
2,2'-oxybis[1-chloropropane]	<0.19		1.51	1.44		mg/Kg	☼	95	40 - 124	7	30
Pentachlorophenol	<0.76	F2	3.03	0.633	J F2	mg/Kg	☼	21	13 - 112	64	30
Phenanthrene	<0.038		1.51	1.36		mg/Kg	☼	90	62 - 120	8	30
Phenol	<0.19		1.51	1.56		mg/Kg	☼	103	56 - 122	7	30
Pyrene	<0.038		1.51	1.32		mg/Kg	☼	87	63 - 120	8	30
1,2,4-Trichlorobenzene	<0.19		1.51	1.30		mg/Kg	☼	86	62 - 110	8	30
2,4,5-Trichlorophenol	<0.38		1.51	1.46		mg/Kg	☼	97	50 - 120	12	30
2,4,6-Trichlorophenol	<0.38		1.51	1.13		mg/Kg	☼	74	57 - 120	16	30

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2-Fluorobiphenyl	94		44 - 121
2-Fluorophenol	106		46 - 133
Nitrobenzene-d5	90		41 - 120
Phenol-d5	104		46 - 125
Terphenyl-d14	78		35 - 160
2,4,6-Tribromophenol	65		25 - 139

**Lab Sample ID: MB 500-422624/1-A**

**Matrix: Solid**

**Analysis Batch: 422703**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 422624**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Carbazole	<0.17		0.17	0.083	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		03/08/18 06:47	03/08/18 15:03	1

TestAmerica Chicago



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-422624/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422703**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422624**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Isophorone	<0.17		0.17	0.037	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Phenol	<0.17		0.17	0.074	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		03/08/18 06:47	03/08/18 15:03	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		03/08/18 06:47	03/08/18 15:03	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	98		44 - 121	03/08/18 06:47	03/08/18 15:03	1
2-Fluorophenol	136	X	46 - 133	03/08/18 06:47	03/08/18 15:03	1
Nitrobenzene-d5	78		41 - 120	03/08/18 06:47	03/08/18 15:03	1
Phenol-d5	112		46 - 125	03/08/18 06:47	03/08/18 15:03	1
Terphenyl-d14	105		35 - 160	03/08/18 06:47	03/08/18 15:03	1
2,4,6-Tribromophenol	86		25 - 139	03/08/18 06:47	03/08/18 15:03	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Lab Sample ID: LCS 500-422624/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422703**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422624**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.33	1.28		mg/Kg		96	58 - 110
Acenaphthylene	1.33	1.27		mg/Kg		95	60 - 110
Anthracene	1.33	1.30		mg/Kg		98	63 - 110
Benzo[a]anthracene	1.33	1.26		mg/Kg		94	63 - 110
Benzo[a]pyrene	1.33	1.27		mg/Kg		95	61 - 120
Benzo[b]fluoranthene	1.33	1.32		mg/Kg		99	62 - 120
Benzo[g,h,i]perylene	1.33	1.32		mg/Kg		99	64 - 120
Benzo[k]fluoranthene	1.33	1.36		mg/Kg		102	65 - 120
Bis(2-chloroethoxy)methane	1.33	1.18		mg/Kg		88	60 - 112
Bis(2-chloroethyl)ether	1.33	1.14		mg/Kg		85	55 - 111
Bis(2-ethylhexyl) phthalate	1.33	1.27		mg/Kg		95	63 - 118
4-Bromophenyl phenyl ether	1.33	1.22		mg/Kg		92	63 - 110
Butyl benzyl phthalate	1.33	1.25		mg/Kg		94	61 - 116
Carbazole	1.33	1.42		mg/Kg		107	59 - 158
4-Chloroaniline	1.33	0.984		mg/Kg		74	30 - 150
4-Chloro-3-methylphenol	1.33	1.19		mg/Kg		89	61 - 114
2-Chloronaphthalene	1.33	1.24		mg/Kg		93	64 - 110
2-Chlorophenol	1.33	1.28		mg/Kg		96	64 - 110
4-Chlorophenyl phenyl ether	1.33	1.21		mg/Kg		90	63 - 110
Chrysene	1.33	1.26		mg/Kg		95	63 - 120
Dibenz(a,h)anthracene	1.33	1.29		mg/Kg		97	64 - 119
Dibenzofuran	1.33	1.20		mg/Kg		90	64 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		89	62 - 110
1,3-Dichlorobenzene	1.33	1.14		mg/Kg		85	60 - 110
1,4-Dichlorobenzene	1.33	1.16		mg/Kg		87	61 - 110
3,3'-Dichlorobenzidine	1.33	0.916		mg/Kg		69	49 - 112
2,4-Dichlorophenol	1.33	1.23		mg/Kg		92	58 - 120
Diethyl phthalate	1.33	1.22		mg/Kg		91	58 - 120
2,4-Dimethylphenol	1.33	1.24		mg/Kg		93	60 - 110
Dimethyl phthalate	1.33	1.19		mg/Kg		89	64 - 110
Di-n-butyl phthalate	1.33	1.27		mg/Kg		95	65 - 120
4,6-Dinitro-2-methylphenol	2.67	2.05		mg/Kg		77	10 - 110
2,4-Dinitrophenol	2.67	1.54		mg/Kg		58	10 - 100
2,4-Dinitrotoluene	1.33	1.31		mg/Kg		98	62 - 117
2,6-Dinitrotoluene	1.33	1.30		mg/Kg		98	67 - 120
Di-n-octyl phthalate	1.33	1.25		mg/Kg		94	63 - 119
Fluoranthene	1.33	1.29		mg/Kg		97	62 - 120
Fluorene	1.33	1.25		mg/Kg		94	62 - 120
Hexachlorobenzene	1.33	1.28		mg/Kg		96	55 - 117
Hexachlorobutadiene	1.33	1.17		mg/Kg		88	56 - 120
Hexachlorocyclopentadiene	1.33	0.730		mg/Kg		55	10 - 106
Hexachloroethane	1.33	1.10		mg/Kg		83	61 - 110
Indeno[1,2,3-cd]pyrene	1.33	1.39		mg/Kg		104	57 - 127
Isophorone	1.33	1.08		mg/Kg		81	55 - 110
2-Methylnaphthalene	1.33	1.22		mg/Kg		91	62 - 110
2-Methylphenol	1.33	1.25		mg/Kg		94	60 - 120
3 & 4 Methylphenol	1.33	1.25		mg/Kg		94	57 - 120
Naphthalene	1.33	1.23		mg/Kg		92	63 - 110
2-Nitroaniline	1.33	1.17		mg/Kg		87	57 - 124
3-Nitroaniline	1.33	0.827		mg/Kg		62	40 - 122

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-422624/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422703**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422624**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
4-Nitroaniline	1.33	1.17		mg/Kg		88	60 - 160
Nitrobenzene	1.33	1.21		mg/Kg		91	60 - 116
2-Nitrophenol	1.33	1.21		mg/Kg		91	60 - 120
4-Nitrophenol	2.67	2.23		mg/Kg		84	30 - 122
N-Nitrosodi-n-propylamine	1.33	1.17		mg/Kg		88	56 - 118
N-Nitrosodiphenylamine	1.33	1.33		mg/Kg		100	65 - 112
2,2'-oxybis[1-chloropropane]	1.33	1.14		mg/Kg		85	40 - 124
Pentachlorophenol	2.67	2.43		mg/Kg		91	13 - 112
Phenanthrene	1.33	1.30		mg/Kg		97	62 - 120
Phenol	1.33	1.28		mg/Kg		96	56 - 122
Pyrene	1.33	1.26		mg/Kg		94	63 - 120
1,2,4-Trichlorobenzene	1.33	1.22		mg/Kg		92	62 - 110
2,4,5-Trichlorophenol	1.33	1.25		mg/Kg		94	50 - 120
2,4,6-Trichlorophenol	1.33	1.25		mg/Kg		93	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	98		44 - 121
2-Fluorophenol	127		46 - 133
Nitrobenzene-d5	92		41 - 120
Phenol-d5	108		46 - 125
Terphenyl-d14	92		35 - 160
2,4,6-Tribromophenol	96		25 - 139

**Lab Sample ID: 500-141780-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 422736**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422624**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	<0.037		1.49	1.42		mg/Kg	☼	96	58 - 110
Acenaphthylene	<0.037		1.49	1.47		mg/Kg	☼	99	60 - 110
Anthracene	<0.037		1.49	1.55		mg/Kg	☼	104	63 - 110
Benzo[a]anthracene	0.023	J	1.49	1.55		mg/Kg	☼	103	63 - 110
Benzo[a]pyrene	0.026	J	1.49	1.64		mg/Kg	☼	109	61 - 120
Benzo[b]fluoranthene	0.042	F1	1.49	1.94	F1	mg/Kg	☼	128	62 - 120
Benzo[g,h,i]perylene	0.023	J F1	1.49	0.893	F1	mg/Kg	☼	59	64 - 120
Benzo[k]fluoranthene	<0.037		1.49	1.75		mg/Kg	☼	118	65 - 120
Bis(2-chloroethoxy)methane	<0.19		1.49	1.36		mg/Kg	☼	92	60 - 112
Bis(2-chloroethyl)ether	<0.19		1.49	1.37		mg/Kg	☼	92	55 - 111
Bis(2-ethylhexyl) phthalate	<0.19		1.49	1.58		mg/Kg	☼	106	63 - 118
4-Bromophenyl phenyl ether	<0.19		1.49	1.55		mg/Kg	☼	104	63 - 110
Butyl benzyl phthalate	<0.19		1.49	1.52		mg/Kg	☼	102	61 - 116
Carbazole	<0.19		1.49	1.67		mg/Kg	☼	113	59 - 158
4-Chloroaniline	<0.74		1.49	1.01		mg/Kg	☼	68	30 - 150
4-Chloro-3-methylphenol	<0.37		1.49	1.42		mg/Kg	☼	95	61 - 114
2-Chloronaphthalene	<0.19		1.49	1.43		mg/Kg	☼	96	64 - 110
2-Chlorophenol	<0.19		1.49	1.35		mg/Kg	☼	91	64 - 110
4-Chlorophenyl phenyl ether	<0.19		1.49	1.55		mg/Kg	☼	104	63 - 110
Chrysene	0.031	J	1.49	1.52		mg/Kg	☼	100	63 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-141780-1 MS**

**Matrix: Solid**

**Analysis Batch: 422736**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422624**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Dibenz(a,h)anthracene	<0.037		1.49	1.16		mg/Kg	☼	78	64 - 119
Dibenzofuran	<0.19		1.49	1.51		mg/Kg	☼	101	64 - 110
1,2-Dichlorobenzene	<0.19		1.49	1.34		mg/Kg	☼	90	62 - 110
1,3-Dichlorobenzene	<0.19		1.49	1.34		mg/Kg	☼	90	60 - 110
1,4-Dichlorobenzene	<0.19		1.49	1.36		mg/Kg	☼	92	61 - 110
3,3'-Dichlorobenzidine	<0.19		1.49	0.801		mg/Kg	☼	54	49 - 112
2,4-Dichlorophenol	<0.37		1.49	1.46		mg/Kg	☼	98	58 - 120
Diethyl phthalate	<0.19		1.49	1.59		mg/Kg	☼	107	58 - 120
2,4-Dimethylphenol	<0.37		1.49	1.45		mg/Kg	☼	98	60 - 110
Dimethyl phthalate	<0.19		1.49	1.54		mg/Kg	☼	104	64 - 110
Di-n-butyl phthalate	<0.19		1.49	1.71		mg/Kg	☼	115	65 - 120
4,6-Dinitro-2-methylphenol	<0.74	F1	2.97	<0.75	F1	mg/Kg	☼	0	10 - 110
2,4-Dinitrophenol	<0.74	F1	2.97	<0.75	F1	mg/Kg	☼	0	10 - 100
2,4-Dinitrotoluene	<0.19		1.49	1.51		mg/Kg	☼	101	62 - 117
2,6-Dinitrotoluene	<0.19		1.49	1.50		mg/Kg	☼	101	67 - 120
Di-n-octyl phthalate	<0.19	F1	1.49	2.44	F1	mg/Kg	☼	164	63 - 119
Fluoranthene	0.046	F1	1.49	1.90	F1	mg/Kg	☼	125	62 - 120
Fluorene	<0.037		1.49	1.52		mg/Kg	☼	102	62 - 120
Hexachlorobenzene	<0.074		1.49	1.65		mg/Kg	☼	111	55 - 117
Hexachlorobutadiene	<0.19		1.49	1.50		mg/Kg	☼	101	56 - 120
Hexachlorocyclopentadiene	<0.74		1.49	0.569	J	mg/Kg	☼	38	10 - 106
Hexachloroethane	<0.19		1.49	1.02		mg/Kg	☼	69	61 - 110
Indeno[1,2,3-cd]pyrene	0.016	J	1.49	1.08		mg/Kg	☼	72	57 - 127
Isophorone	<0.19		1.49	1.16		mg/Kg	☼	78	55 - 110
2-Methylnaphthalene	<0.074		1.49	1.50		mg/Kg	☼	101	62 - 110
2-Methylphenol	<0.19		1.49	1.48		mg/Kg	☼	100	60 - 120
3 & 4 Methylphenol	<0.19		1.49	1.44		mg/Kg	☼	97	57 - 120
Naphthalene	<0.037		1.49	1.39		mg/Kg	☼	93	63 - 110
2-Nitroaniline	<0.19		1.49	1.36		mg/Kg	☼	91	57 - 124
3-Nitroaniline	<0.37		1.49	1.46		mg/Kg	☼	98	40 - 122
4-Nitroaniline	<0.37		1.49	1.48		mg/Kg	☼	99	60 - 160
Nitrobenzene	<0.037		1.49	1.39		mg/Kg	☼	94	60 - 116
2-Nitrophenol	<0.37		1.49	1.27		mg/Kg	☼	86	60 - 120
4-Nitrophenol	<0.74	F1	2.97	3.75	F1	mg/Kg	☼	126	30 - 122
N-Nitrosodi-n-propylamine	<0.074		1.49	1.24		mg/Kg	☼	83	56 - 118
N-Nitrosodiphenylamine	<0.19		1.49	1.43		mg/Kg	☼	96	65 - 112
2,2'-oxybis[1-chloropropane]	<0.19		1.49	1.10		mg/Kg	☼	74	40 - 124
Pentachlorophenol	<0.74		2.97	1.67		mg/Kg	☼	56	13 - 112
Phenanthrene	0.023	J	1.49	1.55		mg/Kg	☼	103	62 - 120
Phenol	<0.19		1.49	1.22		mg/Kg	☼	82	56 - 122
Pyrene	0.042		1.49	1.34		mg/Kg	☼	87	63 - 120
1,2,4-Trichlorobenzene	<0.19		1.49	1.48		mg/Kg	☼	99	62 - 110
2,4,5-Trichlorophenol	<0.37		1.49	1.41		mg/Kg	☼	95	50 - 120
2,4,6-Trichlorophenol	<0.37		1.49	1.51		mg/Kg	☼	102	57 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	99		44 - 121
2-Fluorophenol	96		46 - 133

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-141780-1 MS**

**Matrix: Solid**

**Analysis Batch: 422736**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422624**

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	90		41 - 120
Phenol-d5	89		46 - 125
Terphenyl-d14	88		35 - 160
2,4,6-Tribromophenol	137		25 - 139

**Lab Sample ID: 500-141780-1 MSD**

**Matrix: Solid**

**Analysis Batch: 422736**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422624**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limit	RPD	Limit
Acenaphthene	<0.037		1.48	1.36		mg/Kg	☼	92	58 - 110	4	30
Acenaphthylene	<0.037		1.48	1.41		mg/Kg	☼	95	60 - 110	4	30
Anthracene	<0.037		1.48	1.39		mg/Kg	☼	94	63 - 110	11	30
Benzo[a]anthracene	0.023	J	1.48	1.43		mg/Kg	☼	95	63 - 110	8	30
Benzo[a]pyrene	0.026	J	1.48	1.53		mg/Kg	☼	102	61 - 120	7	30
Benzo[b]fluoranthene	0.042	F1	1.48	1.77		mg/Kg	☼	117	62 - 120	9	30
Benzo[g,h,i]perylene	0.023	J F1	1.48	0.830	F1	mg/Kg	☼	54	64 - 120	7	30
Benzo[k]fluoranthene	<0.037		1.48	1.65		mg/Kg	☼	111	65 - 120	6	30
Bis(2-chloroethoxy)methane	<0.19		1.48	1.29		mg/Kg	☼	87	60 - 112	5	30
Bis(2-chloroethyl)ether	<0.19		1.48	1.30		mg/Kg	☼	88	55 - 111	5	30
Bis(2-ethylhexyl) phthalate	<0.19		1.48	1.47		mg/Kg	☼	99	63 - 118	7	30
4-Bromophenyl phenyl ether	<0.19		1.48	1.41		mg/Kg	☼	95	63 - 110	9	30
Butyl benzyl phthalate	<0.19		1.48	1.41		mg/Kg	☼	95	61 - 116	8	30
Carbazole	<0.19		1.48	1.52		mg/Kg	☼	103	59 - 158	10	30
4-Chloroaniline	<0.74		1.48	0.856		mg/Kg	☼	58	30 - 150	17	30
4-Chloro-3-methylphenol	<0.37		1.48	1.31		mg/Kg	☼	89	61 - 114	8	30
2-Chloronaphthalene	<0.19		1.48	1.38		mg/Kg	☼	93	64 - 110	4	30
2-Chlorophenol	<0.19		1.48	1.30		mg/Kg	☼	87	64 - 110	4	30
4-Chlorophenyl phenyl ether	<0.19		1.48	1.47		mg/Kg	☼	99	63 - 110	6	30
Chrysene	0.031	J	1.48	1.43		mg/Kg	☼	94	63 - 120	6	30
Dibenz(a,h)anthracene	<0.037		1.48	1.07		mg/Kg	☼	72	64 - 119	8	30
Dibenzofuran	<0.19		1.48	1.44		mg/Kg	☼	97	64 - 110	5	30
1,2-Dichlorobenzene	<0.19		1.48	1.30		mg/Kg	☼	88	62 - 110	3	30
1,3-Dichlorobenzene	<0.19		1.48	1.26		mg/Kg	☼	85	60 - 110	6	30
1,4-Dichlorobenzene	<0.19		1.48	1.30		mg/Kg	☼	88	61 - 110	5	30
3,3'-Dichlorobenzidine	<0.19		1.48	0.758		mg/Kg	☼	51	49 - 112	6	30
2,4-Dichlorophenol	<0.37		1.48	1.40		mg/Kg	☼	94	58 - 120	4	30
Diethyl phthalate	<0.19		1.48	1.53		mg/Kg	☼	103	58 - 120	4	30
2,4-Dimethylphenol	<0.37		1.48	1.39		mg/Kg	☼	94	60 - 110	5	30
Dimethyl phthalate	<0.19		1.48	1.47		mg/Kg	☼	99	64 - 110	5	30
Di-n-butyl phthalate	<0.19		1.48	1.52		mg/Kg	☼	102	65 - 120	12	30
4,6-Dinitro-2-methylphenol	<0.74	F1	2.96	<0.74	F1	mg/Kg	☼	0	10 - 110	NC	30
2,4-Dinitrophenol	<0.74	F1	2.96	<0.74	F1	mg/Kg	☼	0	10 - 100	NC	30
2,4-Dinitrotoluene	<0.19		1.48	1.38		mg/Kg	☼	93	62 - 117	9	30
2,6-Dinitrotoluene	<0.19		1.48	1.39		mg/Kg	☼	94	67 - 120	7	30
Di-n-octyl phthalate	<0.19	F1	1.48	2.21	F1	mg/Kg	☼	149	63 - 119	10	30
Fluoranthene	0.046	F1	1.48	1.71		mg/Kg	☼	112	62 - 120	11	30
Fluorene	<0.037		1.48	1.46		mg/Kg	☼	98	62 - 120	4	30

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-141780-1 MSD

Matrix: Solid

Analysis Batch: 422736

Client Sample ID: 2490V2-3-B12 (0-5)

Prep Type: Total/NA

Prep Batch: 422624

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Hexachlorobenzene	<0.074		1.48	1.49		mg/Kg	☼	100	55 - 117	10	30
Hexachlorobutadiene	<0.19		1.48	1.43		mg/Kg	☼	96	56 - 120	5	30
Hexachlorocyclopentadiene	<0.74		1.48	0.568	J	mg/Kg	☼	38	10 - 106	0	30
Hexachloroethane	<0.19		1.48	0.937		mg/Kg	☼	63	61 - 110	8	30
Indeno[1,2,3-cd]pyrene	0.016	J	1.48	1.01		mg/Kg	☼	67	57 - 127	7	30
Isophorone	<0.19		1.48	1.12		mg/Kg	☼	75	55 - 110	4	30
2-Methylnaphthalene	<0.074		1.48	1.43		mg/Kg	☼	97	62 - 110	4	30
2-Methylphenol	<0.19		1.48	1.18		mg/Kg	☼	79	60 - 120	23	30
3 & 4 Methylphenol	<0.19		1.48	1.42		mg/Kg	☼	96	57 - 120	1	30
Naphthalene	<0.037		1.48	1.33		mg/Kg	☼	89	63 - 110	4	30
2-Nitroaniline	<0.19		1.48	1.30		mg/Kg	☼	88	57 - 124	4	30
3-Nitroaniline	<0.37		1.48	1.31		mg/Kg	☼	88	40 - 122	11	30
4-Nitroaniline	<0.37		1.48	1.34		mg/Kg	☼	91	60 - 160	10	30
Nitrobenzene	<0.037		1.48	1.29		mg/Kg	☼	87	60 - 116	7	30
2-Nitrophenol	<0.37		1.48	1.25		mg/Kg	☼	84	60 - 120	2	30
4-Nitrophenol	<0.74	F1	2.96	3.52		mg/Kg	☼	119	30 - 122	6	30
N-Nitrosodi-n-propylamine	<0.074		1.48	1.19		mg/Kg	☼	80	56 - 118	4	30
N-Nitrosodiphenylamine	<0.19		1.48	1.30		mg/Kg	☼	88	65 - 112	9	30
2,2'-oxybis[1-chloropropane]	<0.19		1.48	1.02		mg/Kg	☼	69	40 - 124	7	30
Pentachlorophenol	<0.74		2.96	1.76		mg/Kg	☼	59	13 - 112	5	30
Phenanthrene	0.023	J	1.48	1.41		mg/Kg	☼	93	62 - 120	10	30
Phenol	<0.19		1.48	1.17		mg/Kg	☼	79	56 - 122	4	30
Pyrene	0.042		1.48	1.25		mg/Kg	☼	82	63 - 120	7	30
1,2,4-Trichlorobenzene	<0.19		1.48	1.40		mg/Kg	☼	95	62 - 110	5	30
2,4,5-Trichlorophenol	<0.37		1.48	1.37		mg/Kg	☼	92	50 - 120	3	30
2,4,6-Trichlorophenol	<0.37		1.48	1.48		mg/Kg	☼	100	57 - 120	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	96		44 - 121
2-Fluorophenol	94		46 - 133
Nitrobenzene-d5	86		41 - 120
Phenol-d5	86		46 - 125
Terphenyl-d14	81		35 - 160
2,4,6-Tribromophenol	131		25 - 139

## Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-422645/1-A

Matrix: Solid

Analysis Batch: 423061

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422645

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.396	J	2.0	0.39	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Arsenic	<1.0		1.0	0.34	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Barium	<1.0		1.0	0.11	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Beryllium	<0.40		0.40	0.093	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Cadmium	0.0631	J	0.20	0.036	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Chromium	<1.0		1.0	0.50	mg/Kg		03/08/18 07:44	03/10/18 00:38	1

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-422645/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.50		0.50	0.13	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Copper	<1.0		1.0	0.28	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Iron	<20		20	10	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Lead	<0.50		0.50	0.23	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Magnesium	<10		10	5.0	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Calcium	6.20	J	20	3.4	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Manganese	<1.0		1.0	0.15	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Nickel	<1.0		1.0	0.29	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Selenium	<1.0		1.0	0.59	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Silver	<0.50		0.50	0.13	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Thallium	<1.0		1.0	0.50	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Vanadium	<0.50		0.50	0.12	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Zinc	<2.0		2.0	0.88	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Potassium	<50		50	18	mg/Kg		03/08/18 07:44	03/10/18 00:38	1
Sodium	<100		100	15	mg/Kg		03/08/18 07:44	03/10/18 00:38	1

**Lab Sample ID: LCS 500-422645/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.0		mg/Kg		92	80 - 120
Arsenic	10.0	9.25		mg/Kg		93	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.62		mg/Kg		92	80 - 120
Cadmium	5.00	4.78		mg/Kg		96	80 - 120
Chromium	20.0	18.5		mg/Kg		93	80 - 120
Cobalt	50.0	47.3		mg/Kg		95	80 - 120
Copper	25.0	24.1		mg/Kg		96	80 - 120
Iron	100	112		mg/Kg		112	80 - 120
Lead	10.0	9.71		mg/Kg		97	80 - 120
Magnesium	1000	933		mg/Kg		93	80 - 120
Calcium	1000	979		mg/Kg		98	80 - 120
Manganese	50.0	47.5		mg/Kg		95	80 - 120
Nickel	50.0	47.4		mg/Kg		95	80 - 120
Selenium	10.0	9.11		mg/Kg		91	80 - 120
Silver	5.00	4.69		mg/Kg		94	80 - 120
Thallium	10.0	8.87		mg/Kg		89	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	55.6		mg/Kg		111	80 - 120
Potassium	1000	939		mg/Kg		94	80 - 120
Sodium	1000	960		mg/Kg		96	80 - 120

**Lab Sample ID: 500-141780-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.20	J B F1	26.3	3.42	F1	mg/Kg	☼	12	75 - 125

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141780-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	5.2		5.26	9.57		mg/Kg	☼	83	75 - 125
Barium	31		105	119		mg/Kg	☼	84	75 - 125
Beryllium	0.59		2.63	2.81		mg/Kg	☼	85	75 - 125
Cadmium	<0.10		2.63	2.18		mg/Kg	☼	83	75 - 125
Chromium	16		10.5	25.4		mg/Kg	☼	93	75 - 125
Cobalt	12		26.3	36.6		mg/Kg	☼	93	75 - 125
Copper	19		13.1	30.7		mg/Kg	☼	93	75 - 125
Iron	16000		52.6	17000	4	mg/Kg	☼	2391	75 - 125
Lead	11		5.26	16.0		mg/Kg	☼	89	75 - 125
Magnesium	34000		526	35700	4	mg/Kg	☼	394	75 - 125
Manganese	350		26.3	353	4	mg/Kg	☼	16	75 - 125
Nickel	29		26.3	51.9		mg/Kg	☼	87	75 - 125
Selenium	<0.52	F1	5.26	3.66	F1	mg/Kg	☼	70	75 - 125
Silver	<0.26		2.63	2.23		mg/Kg	☼	85	75 - 125
Thallium	<0.52	F1	5.26	3.86	F1	mg/Kg	☼	73	75 - 125
Vanadium	19		26.3	42.3		mg/Kg	☼	89	75 - 125
Zinc	47		26.3	71.4		mg/Kg	☼	93	75 - 125
Potassium	2700		526	4680	4	mg/Kg	☼	375	75 - 125
Sodium	470		526	986		mg/Kg	☼	97	75 - 125

**Lab Sample ID: 500-141780-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	100000	B	526	96100	4	mg/Kg	☼	-944	75 - 125

**Lab Sample ID: 500-141780-21 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.20	J B F1	26.1	3.52	F1	mg/Kg	☼	13	75 - 125	3	20
Arsenic	5.2		5.22	9.93		mg/Kg	☼	91	75 - 125	4	20
Barium	31		104	119		mg/Kg	☼	84	75 - 125	0	20
Beryllium	0.59		2.61	2.80		mg/Kg	☼	85	75 - 125	1	20
Cadmium	<0.10		2.61	2.10		mg/Kg	☼	80	75 - 125	4	20
Chromium	16		10.4	25.6		mg/Kg	☼	95	75 - 125	1	20
Cobalt	12		26.1	37.4		mg/Kg	☼	96	75 - 125	2	20
Copper	19		13.1	30.1		mg/Kg	☼	89	75 - 125	2	20
Iron	16000		52.2	17300	4	mg/Kg	☼	3120	75 - 125	2	20
Lead	11		5.22	15.8		mg/Kg	☼	85	75 - 125	1	20
Magnesium	34000		522	35500	4	mg/Kg	☼	345	75 - 125	1	20
Manganese	350		26.1	381	4	mg/Kg	☼	124	75 - 125	8	20
Nickel	29		26.1	53.6		mg/Kg	☼	94	75 - 125	3	20
Selenium	<0.52	F1	5.22	3.78	F1	mg/Kg	☼	72	75 - 125	3	20
Silver	<0.26		2.61	2.20		mg/Kg	☼	84	75 - 125	1	20
Thallium	<0.52	F1	5.22	4.00		mg/Kg	☼	77	75 - 125	4	20
Vanadium	19		26.1	42.6		mg/Kg	☼	91	75 - 125	1	20

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141780-21 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Zinc	47		26.1	71.3		mg/Kg	☼	93	75 - 125	0	20
Potassium	2700		522	4720	4	mg/Kg	☼	387	75 - 125	1	20
Sodium	470		522	981		mg/Kg	☼	97	75 - 125	0	20

**Lab Sample ID: 500-141780-21 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	100000	B	522	100000	4	mg/Kg	☼	-103	75 - 125	4	20

**Lab Sample ID: 500-141780-21 DU**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.20	J B F1	<1.0		mg/Kg	☼	NC	20
Arsenic	5.2		5.23		mg/Kg	☼	0.5	20
Barium	31		31.8		mg/Kg	☼	2	20
Beryllium	0.59		0.608		mg/Kg	☼	3	20
Cadmium	<0.10		<0.10		mg/Kg	☼	NC	20
Chromium	16		15.2		mg/Kg	☼	3	20
Cobalt	12		11.4		mg/Kg	☼	7	20
Copper	19		18.0		mg/Kg	☼	3	20
Iron	16000		15800		mg/Kg	☼	0.5	20
Lead	11		10.6		mg/Kg	☼	7	20
Magnesium	34000		38100		mg/Kg	☼	12	20
Manganese	350		327		mg/Kg	☼	7	20
Nickel	29		26.4		mg/Kg	☼	10	20
Selenium	<0.52	F1	0.454	J	mg/Kg	☼	NC	20
Silver	<0.26		<0.26		mg/Kg	☼	NC	20
Thallium	<0.52	F1	<0.52		mg/Kg	☼	NC	20
Vanadium	19		19.0		mg/Kg	☼	1	20
Zinc	47		44.2		mg/Kg	☼	6	20
Potassium	2700		2960		mg/Kg	☼	9	20
Sodium	470		490		mg/Kg	☼	3	20

**Lab Sample ID: 500-141780-21 DU**  
**Matrix: Solid**  
**Analysis Batch: 423236**

**Client Sample ID: 2490V2-3-B30 (5-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 422645**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	100000	B	106000		mg/Kg	☼	5	20

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-422762/1-A**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Arsenic	<1.0		1.0	0.34	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Barium	<1.0		1.0	0.11	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Beryllium	<0.40		0.40	0.093	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Cadmium	0.0683	J	0.20	0.036	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Chromium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Cobalt	<0.50		0.50	0.13	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Copper	<1.0		1.0	0.28	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Iron	<20		20	10	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Lead	<0.50		0.50	0.23	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Magnesium	5.71	J	10	5.0	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Calcium	13.9	J	20	3.4	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Manganese	<1.0		1.0	0.15	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Nickel	<1.0		1.0	0.29	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Selenium	<1.0		1.0	0.59	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Silver	<0.50		0.50	0.13	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Thallium	<1.0		1.0	0.50	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Vanadium	<0.50		0.50	0.12	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Zinc	<2.0		2.0	0.88	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Potassium	<50		50	18	mg/Kg		03/08/18 17:11	03/10/18 04:35	1
Sodium	16.3	J	100	15	mg/Kg		03/08/18 17:11	03/10/18 04:35	1

**Lab Sample ID: LCS 500-422762/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	49.2		mg/Kg		98	80 - 120
Arsenic	10.0	9.67		mg/Kg		97	80 - 120
Barium	200	200		mg/Kg		100	80 - 120
Beryllium	5.00	4.73		mg/Kg		95	80 - 120
Cadmium	5.00	4.94		mg/Kg		99	80 - 120
Chromium	20.0	18.9		mg/Kg		94	80 - 120
Cobalt	50.0	49.4		mg/Kg		99	80 - 120
Copper	25.0	25.3		mg/Kg		101	80 - 120
Iron	100	113		mg/Kg		113	80 - 120
Lead	10.0	9.59		mg/Kg		96	80 - 120
Magnesium	1000	956		mg/Kg		96	80 - 120
Calcium	1000	1000		mg/Kg		100	80 - 120
Manganese	50.0	48.3		mg/Kg		97	80 - 120
Nickel	50.0	49.0		mg/Kg		98	80 - 120
Selenium	10.0	8.95		mg/Kg		90	80 - 120
Silver	5.00	4.73		mg/Kg		95	80 - 120
Thallium	10.0	8.62		mg/Kg		86	80 - 120
Vanadium	50.0	48.4		mg/Kg		97	80 - 120
Zinc	50.0	46.9		mg/Kg		94	80 - 120
Potassium	1000	999		mg/Kg		100	80 - 120
Sodium	1000	1040		mg/Kg		104	80 - 120

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141780-1 MS**

**Matrix: Solid**

**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422762**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<1.1	F1	28.1	5.62	F1	mg/Kg	☼	20	75 - 125
Arsenic	6.3	F1	5.63	9.90	F1	mg/Kg	☼	65	75 - 125
Barium	53		113	143		mg/Kg	☼	80	75 - 125
Beryllium	0.59		2.81	2.84		mg/Kg	☼	80	75 - 125
Cadmium	0.058	J B	2.81	2.48		mg/Kg	☼	86	75 - 125
Chromium	16		11.3	25.3		mg/Kg	☼	81	75 - 125
Cobalt	12		28.1	36.3		mg/Kg	☼	88	75 - 125
Copper	22		14.1	32.7		mg/Kg	☼	78	75 - 125
Iron	17000		56.3	14900	4	mg/Kg	☼	-4299	75 - 125
Lead	52	F2	5.63	84.9	4	mg/Kg	☼	579	75 - 125
Magnesium	22000	B F2	563	23600	4	mg/Kg	☼	272	75 - 125
Manganese	440		28.1	388	4	mg/Kg	☼	-184	75 - 125
Nickel	26		28.1	47.6		mg/Kg	☼	79	75 - 125
Selenium	0.52	J F1	5.63	4.33	F1	mg/Kg	☼	68	75 - 125
Silver	<0.28		2.81	2.39		mg/Kg	☼	85	75 - 125
Thallium	<0.56	F1	5.63	4.17	F1	mg/Kg	☼	74	75 - 125
Vanadium	21		28.1	45.7		mg/Kg	☼	87	75 - 125
Zinc	64		28.1	93.9		mg/Kg	☼	108	75 - 125
Potassium	1800	F1 F2	563	2730	F1	mg/Kg	☼	165	75 - 125
Sodium	1900	B F1	563	2150	F1	mg/Kg	☼	53	75 - 125

**Lab Sample ID: 500-141780-1 MS**

**Matrix: Solid**

**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422762**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Calcium	62000	B F2	563	57700	4	mg/Kg	☼	-816	75 - 125

**Lab Sample ID: 500-141780-1 MSD**

**Matrix: Solid**

**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Prep Type: Total/NA**

**Prep Batch: 422762**

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Antimony	<1.1	F1	28.2	5.12	F1	mg/Kg	☼	18	75 - 125	9	20
Arsenic	6.3	F1	5.63	10.1	F1	mg/Kg	☼	68	75 - 125	2	20
Barium	53		113	159		mg/Kg	☼	94	75 - 125	11	20
Beryllium	0.59		2.82	3.07		mg/Kg	☼	88	75 - 125	8	20
Cadmium	0.058	J B	2.82	2.51		mg/Kg	☼	87	75 - 125	1	20
Chromium	16		11.3	26.3		mg/Kg	☼	90	75 - 125	4	20
Cobalt	12		28.2	36.4		mg/Kg	☼	88	75 - 125	0	20
Copper	22		14.1	35.5		mg/Kg	☼	97	75 - 125	8	20
Iron	17000		56.3	16700	4	mg/Kg	☼	-1210	75 - 125	11	20
Lead	52	F2	5.63	67.2	4 F2	mg/Kg	☼	264	75 - 125	23	20
Magnesium	22000	B F2	563	31500	4 F2	mg/Kg	☼	1685	75 - 125	29	20
Manganese	440		28.2	333	4	mg/Kg	☼	-379	75 - 125	15	20
Nickel	26		28.2	51.6		mg/Kg	☼	93	75 - 125	8	20
Selenium	0.52	J F1	5.63	4.20	F1	mg/Kg	☼	65	75 - 125	3	20
Silver	<0.28		2.82	2.48		mg/Kg	☼	88	75 - 125	3	20

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141780-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Thallium	<0.56	F1	5.63	3.90	F1	mg/Kg	☼	69	75 - 125	7	20	
Vanadium	21		28.2	46.3		mg/Kg	☼	89	75 - 125	1	20	
Zinc	64		28.2	85.5		mg/Kg	☼	78	75 - 125	9	20	
Potassium	1800	F1 F2	563	4020	F1 F2	mg/Kg	☼	393	75 - 125	38	20	
Sodium	1900	B F1	563	2240	F1	mg/Kg	☼	69	75 - 125	4	20	

**Lab Sample ID: 500-141780-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Calcium	62000	B F2	563	93500	4 F2	mg/Kg	☼	5544	75 - 125	47	20	

**Lab Sample ID: 500-141780-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 423061**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	Sample	Sample	DU	DU		Unit	D	RPD	Limit
	Result	Qualifier		Result	Qualifier				
Antimony	<1.1	F1	<1.1		mg/Kg	☼	NC	20	
Arsenic	6.3	F1	4.99	F3	mg/Kg	☼	23	20	
Barium	53		45.9		mg/Kg	☼	14	20	
Beryllium	0.59		0.487		mg/Kg	☼	19	20	
Cadmium	0.058	J B	0.108	J F5	mg/Kg	☼	60	20	
Chromium	16		13.7		mg/Kg	☼	16	20	
Cobalt	12		9.62		mg/Kg	☼	19	20	
Copper	22		18.5		mg/Kg	☼	16	20	
Iron	17000		14500		mg/Kg	☼	18	20	
Lead	52	F2	44.4		mg/Kg	☼	16	20	
Magnesium	22000	B F2	26000		mg/Kg	☼	17	20	
Manganese	440		404		mg/Kg	☼	8	20	
Nickel	26		21.0		mg/Kg	☼	20	20	
Selenium	0.52	J F1	0.333	J F5	mg/Kg	☼	43	20	
Silver	<0.28		<0.27		mg/Kg	☼	NC	20	
Thallium	<0.56	F1	<0.55		mg/Kg	☼	NC	20	
Vanadium	21		19.3		mg/Kg	☼	10	20	
Zinc	64		51.4	F3	mg/Kg	☼	21	20	
Potassium	1800	F1 F2	1590		mg/Kg	☼	13	20	
Sodium	1900	B F1	1570		mg/Kg	☼	17	20	

**Lab Sample ID: 500-141780-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422762**

Analyte	Sample	Sample	DU	DU		Unit	D	RPD	Limit
	Result	Qualifier		Result	Qualifier				
Calcium	62000	B F2	75600		mg/Kg	☼	19	20	

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-422917/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423234**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422917**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0919		mg/L		92	80 - 120
Barium	0.500	0.483	J	mg/L		97	80 - 120
Beryllium	0.0500	0.0493		mg/L		99	80 - 120
Cadmium	0.0500	0.0485		mg/L		97	80 - 120
Chromium	0.200	0.193		mg/L		96	80 - 120
Cobalt	0.500	0.483		mg/L		97	80 - 120
Copper	0.250	0.243		mg/L		97	80 - 120
Iron	1.00	1.12		mg/L		112	80 - 120
Lead	0.100	0.0956		mg/L		96	80 - 120
Magnesium	10.0	9.69		mg/L		97	80 - 120
Calcium	10.0	9.94		mg/L		99	80 - 120
Manganese	0.500	0.481		mg/L		96	80 - 120
Nickel	0.500	0.484		mg/L		97	80 - 120
Selenium	0.100	0.0849		mg/L		85	80 - 120
Silver	0.0500	0.0477		mg/L		95	80 - 120
Vanadium	0.500	0.477		mg/L		95	80 - 120
Zinc	0.500	0.483	J	mg/L		97	80 - 120
Potassium	10.0	9.83		mg/L		98	80 - 120

**Lab Sample ID: LCS 500-422918/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422918**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0960		mg/L		96	80 - 120
Manganese	0.500	0.490		mg/L		98	80 - 120

**Lab Sample ID: LCS 500-422920/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422920**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.516		mg/L		103	80 - 120

**Lab Sample ID: LCS 500-423214/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423427**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423214**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0945		mg/L		94	80 - 120
Barium	0.500	0.489	J	mg/L		98	80 - 120
Beryllium	0.0500	0.0491		mg/L		98	80 - 120
Cadmium	0.0500	0.0479		mg/L		96	80 - 120
Chromium	0.200	0.199		mg/L		100	80 - 120
Cobalt	0.500	0.484		mg/L		97	80 - 120
Copper	0.250	0.246		mg/L		98	80 - 120
Iron	1.00	0.990		mg/L		99	80 - 120
Lead	0.100	0.0956		mg/L		96	80 - 120
Magnesium	10.0	9.43		mg/L		94	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 500-423214/2-A**  
**Matrix: Solid**  
**Analysis Batch: 423427**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423214**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	9.65		mg/L		96	80 - 120
Manganese	0.500	0.491		mg/L		98	80 - 120
Nickel	0.500	0.485		mg/L		97	80 - 120
Selenium	0.100	0.0935		mg/L		94	80 - 120
Silver	0.0500	0.0485		mg/L		97	80 - 120
Vanadium	0.500	0.495		mg/L		99	80 - 120
Zinc	0.500	0.484	J	mg/L		97	80 - 120
Potassium	10.0	9.38		mg/L		94	80 - 120

**Lab Sample ID: LB 500-422731/1-C**  
**Matrix: Solid**  
**Analysis Batch: 423234**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 422917**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Barium	<0.50		0.50	0.050	mg/L		03/09/18 14:58	03/12/18 21:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/09/18 14:58	03/12/18 21:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/09/18 14:58	03/12/18 21:14	1
Chromium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Cobalt	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Copper	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Iron	<0.40		0.40	0.20	mg/L		03/09/18 14:58	03/12/18 21:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 14:58	03/12/18 21:14	1
Magnesium	<2.5		2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:14	1
Calcium	<5.0		5.0	0.50	mg/L		03/09/18 14:58	03/12/18 21:14	1
Manganese	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Nickel	0.0102	J	0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Selenium	<0.050		0.050	0.020	mg/L		03/09/18 14:58	03/12/18 21:14	1
Silver	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Vanadium	<0.025		0.025	0.010	mg/L		03/09/18 14:58	03/12/18 21:14	1
Zinc	<0.50		0.50	0.020	mg/L		03/09/18 14:58	03/12/18 21:14	1
Potassium	1.21	J	2.5	0.50	mg/L		03/09/18 14:58	03/12/18 21:14	1

**Lab Sample ID: 500-141780-20 MS**  
**Matrix: Solid**  
**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B30 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 422917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	<0.050		0.100	0.0991		mg/L		99	75 - 125
Barium	0.21	J	0.500	0.686		mg/L		95	75 - 125
Beryllium	<0.0040		0.0500	0.0510		mg/L		102	75 - 125
Cadmium	<0.0050		0.0500	0.0545		mg/L		109	75 - 125
Chromium	<0.025		0.200	0.195		mg/L		98	75 - 125
Cobalt	<0.025		0.500	0.510		mg/L		102	75 - 125
Copper	<0.025		0.250	0.275		mg/L		110	75 - 125
Iron	0.36	J F1	1.00	2.04	F1	mg/L		167	75 - 125
Lead	<0.0075		0.100	0.0980		mg/L		98	75 - 125
Magnesium	19		10.0	29.3		mg/L		101	75 - 125
Calcium	58		10.0	69.0	4	mg/L		111	75 - 125

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-141780-20 MS**

**Matrix: Solid**

**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Prep Type: TCLP**

**Prep Batch: 422917**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Manganese	0.22		0.500	0.702		mg/L		96	75 - 125	
Nickel	0.010	J B	0.500	0.510		mg/L		100	75 - 125	
Selenium	<0.050		0.100	0.0880		mg/L		88	75 - 125	
Silver	<0.025		0.0500	0.0568		mg/L		114	75 - 125	
Vanadium	<0.025		0.500	0.481		mg/L		96	75 - 125	
Zinc	0.024	J	0.500	0.555		mg/L		106	75 - 125	
Potassium	1.1	J B	10.0	12.0		mg/L		108	75 - 125	

**Lab Sample ID: 500-141780-20 DU**

**Matrix: Solid**

**Analysis Batch: 423234**

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Prep Type: TCLP**

**Prep Batch: 422917**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	<0.050		<0.050		mg/L		NC	20
Barium	0.21	J	0.211	J	mg/L		0.4	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	<0.025		<0.025		mg/L		NC	20
Copper	<0.025		<0.025		mg/L		NC	20
Iron	0.36	J F1	0.435		mg/L		18	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Magnesium	19		19.2		mg/L		0.2	20
Calcium	58		57.5		mg/L		0.6	20
Manganese	0.22		0.220		mg/L		0.06	20
Nickel	0.010	J B	<0.025		mg/L		NC	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Vanadium	<0.025		<0.025		mg/L		NC	20
Zinc	0.024	J	0.0236	J	mg/L		2	20
Potassium	1.1	J B	1.14	J	mg/L		2	20

**Lab Sample ID: LB 500-422740/1-E**

**Matrix: Solid**

**Analysis Batch: 423427**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 423214**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Barium	<0.50		0.50	0.050	mg/L		03/13/18 06:48	03/13/18 12:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:48	03/13/18 12:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:48	03/13/18 12:50	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:48	03/13/18 12:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:48	03/13/18 12:50	1
Magnesium	<2.5		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 12:50	1
Calcium	<5.0		5.0	0.50	mg/L		03/13/18 06:48	03/13/18 12:50	1
Manganese	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LB 500-422740/1-E**  
**Matrix: Solid**  
**Analysis Batch: 423427**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423214**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:48	03/13/18 12:50	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:48	03/13/18 12:50	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:48	03/13/18 12:50	1
Potassium	<2.5		2.5	0.50	mg/L		03/13/18 06:48	03/13/18 12:50	1

**Lab Sample ID: LB 500-422734/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 422918**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		03/09/18 15:00	03/12/18 17:51	1
Manganese	<0.025		0.025	0.010	mg/L		03/09/18 15:00	03/12/18 17:51	1

**Lab Sample ID: 500-141780-20 MS**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: 2490V2-3-B30 (0-5)**  
**Prep Type: SPLP East**  
**Prep Batch: 422918**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Lead	0.099		0.100	0.197		mg/L		97	75 - 125
Manganese	1.5		0.500	2.08		mg/L		124	75 - 125

**Lab Sample ID: 500-141780-20 DU**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: 2490V2-3-B30 (0-5)**  
**Prep Type: SPLP East**  
**Prep Batch: 422918**

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	RPD	Limit
			Result	Qualifier					
Lead	0.099		0.104		mg/L		5	20	
Manganese	1.5		1.53		mg/L		5	20	

**Lab Sample ID: LB 500-422735/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: Method Blank**  
**Prep Type: SPLP East**  
**Prep Batch: 422920**

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		03/09/18 15:01	03/12/18 12:24	1

**Lab Sample ID: 500-141780-23 MS**  
**Matrix: Solid**  
**Analysis Batch: 423235**

**Client Sample ID: 2490V2-3-B31 (5-10)**  
**Prep Type: SPLP East**  
**Prep Batch: 422920**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Manganese	0.47		0.500	1.00		mg/L		107	75 - 125

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-141780-23 DU

Matrix: Solid

Analysis Batch: 423235

Client Sample ID: 2490V2-3-B31 (5-10)

Prep Type: SPLP East

Prep Batch: 422920

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.47		0.471		mg/L		0.6	20

## Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-422917/2-A

Matrix: Solid

Analysis Batch: 423264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.476		mg/L		95	80 - 120
Thallium	0.100	0.0940		mg/L		94	80 - 120

Lab Sample ID: LCS 500-423214/2-A

Matrix: Solid

Analysis Batch: 423473

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.457		mg/L		91	80 - 120
Thallium	0.100	0.112		mg/L		112	80 - 120

Lab Sample ID: LB 500-422731/1-C

Matrix: Solid

Analysis Batch: 423264

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 422917

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/09/18 14:58	03/12/18 17:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/09/18 14:58	03/12/18 17:54	1

Lab Sample ID: 500-141780-20 MS

Matrix: Solid

Analysis Batch: 423264

Client Sample ID: 2490V2-3-B30 (0-5)

Prep Type: TCLP

Prep Batch: 422917

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.458		mg/L		92	75 - 125
Thallium	<0.0020		0.100	0.103		mg/L		103	75 - 125

Lab Sample ID: 500-141780-20 DU

Matrix: Solid

Analysis Batch: 423264

Client Sample ID: 2490V2-3-B30 (0-5)

Prep Type: TCLP

Prep Batch: 422917

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LB 500-422740/1-E**  
**Matrix: Solid**  
**Analysis Batch: 423473**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423214**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:48	03/14/18 09:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:48	03/14/18 09:59	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID: MB 500-422894/12-A**  
**Matrix: Solid**  
**Analysis Batch: 423140**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422894**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:21	1

**Lab Sample ID: LCS 500-422894/13-A**  
**Matrix: Solid**  
**Analysis Batch: 423140**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422894**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00186		mg/L		93	80 - 120

**Lab Sample ID: MB 500-423145/12-A**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423145**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 10:59	1

**Lab Sample ID: LCS 500-423145/13-A**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423145**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00210		mg/L		105	80 - 120

**Lab Sample ID: LB 500-422731/1-B**  
**Matrix: Solid**  
**Analysis Batch: 423140**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 422894**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/09/18 12:10	03/12/18 11:25	1

**Lab Sample ID: 500-141780-4 MS**  
**Matrix: Solid**  
**Analysis Batch: 423140**

**Client Sample ID: 2490V2-3-B13 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 422894**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00100		mg/L		100	75 - 125

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 7470A - TCLP Mercury (Continued)

**Lab Sample ID: 500-141780-4 DU**  
**Matrix: Solid**  
**Analysis Batch: 423140**

**Client Sample ID: 2490V2-3-B13 (0-5)**  
**Prep Type: TCLP**  
**Prep Batch: 422894**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

**Lab Sample ID: LB 500-422740/1-D**  
**Matrix: Solid**  
**Analysis Batch: 423309**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 423145**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/12/18 12:30	03/13/18 12:40	1

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-422725/12-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422725**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		03/08/18 13:31	03/09/18 08:59	1

**Lab Sample ID: LCS 500-422725/13-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422725**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.167		mg/Kg		100	80 - 120

**Lab Sample ID: 500-141780-18 MS**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B29 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422725**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.043		0.0947	0.123		mg/Kg	☼	85	75 - 125

**Lab Sample ID: 500-141780-18 MSD**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B29 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422725**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.043		0.0957	0.134		mg/Kg	☼	95	75 - 125	8	20

**Lab Sample ID: 500-141780-18 DU**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: 2490V2-3-B29 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422725**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.043		0.0421		mg/Kg	☼	2	20

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 7471B - Mercury (CVAA) (Continued)

**Lab Sample ID: MB 500-422730/11-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		03/08/18 14:55	03/09/18 10:05	1

**Lab Sample ID: LCS 500-422730/12-A**  
**Matrix: Solid**  
**Analysis Batch: 422882**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422730**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.168		mg/Kg		101	80 - 120

## Method: 9014 - Cyanide

**Lab Sample ID: MB 500-422675/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422933**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422675**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg		03/08/18 11:07	03/08/18 15:57	1

**Lab Sample ID: LCS 500-422675/2-A**  
**Matrix: Solid**  
**Analysis Batch: 422933**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422675**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	5.00	5.24		mg/Kg		105	80 - 120

**Lab Sample ID: 500-141780-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 422933**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422675**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	<0.47		2.23	2.43		mg/Kg	☼	109	75 - 125

**Lab Sample ID: 500-141780-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 422933**

**Client Sample ID: 2490V2-3-B12 (0-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 422675**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyanide, Total	<0.47		1.87	2.06		mg/Kg	☼	110	75 - 125	17	20

**Lab Sample ID: MB 500-422712/1-A**  
**Matrix: Solid**  
**Analysis Batch: 422929**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422712**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg		03/08/18 15:20	03/09/18 15:30	1

TestAmerica Chicago

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Method: 9014 - Cyanide (Continued)

Lab Sample ID: LCS 500-422712/2-A  
 Matrix: Solid  
 Analysis Batch: 422929

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 422712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	5.00	5.15		mg/Kg		103	80 - 120

Lab Sample ID: 500-141780-17 MS  
 Matrix: Solid  
 Analysis Batch: 422929

Client Sample ID: 2490V2-3-B28 (0-5)  
 Prep Type: Total/NA  
 Prep Batch: 422712

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	<0.53		2.12	2.17		mg/Kg	✳	102	75 - 125

Lab Sample ID: 500-141780-17 MSD  
 Matrix: Solid  
 Analysis Batch: 422929

Client Sample ID: 2490V2-3-B28 (0-5)  
 Prep Type: Total/NA  
 Prep Batch: 422712

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyanide, Total	<0.53		2.13	2.08		mg/Kg	✳	98	75 - 125	4	20

## Method: 9045D - pH

Lab Sample ID: 500-141780-1 DU  
 Matrix: Solid  
 Analysis Batch: 423199

Client Sample ID: 2490V2-3-B12 (0-5)  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.6		8.57		SU		0.2	

Lab Sample ID: 500-141780-22 DU  
 Matrix: Solid  
 Analysis Batch: 423199

Client Sample ID: 2490V2-3-B31 (0-5)  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.0		7.04		SU		0.1	

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

**Date Collected: 03/05/18 13:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 21:22	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 17:56	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:27	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:46		
					(End)	03/12/18 17:48		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B12 (0-5)**

**Lab Sample ID: 500-141780-1**

**Date Collected: 03/05/18 13:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 16:28	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 23:53	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 04:55	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/12/18 23:53	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:03	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 15:58		
					(End)	03/08/18 15:58		

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:05	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1	423234	03/12/18 21:35	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		10	423343	03/13/18 13:50	KML	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 17:57	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:28	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:50		
					(End)	03/12/18 17:52		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B12 (5-10)**

**Lab Sample ID: 500-141780-2**

**Date Collected: 03/05/18 13:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 16:53	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 16:21	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:16	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:21	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:05	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 15:59		
					(End)	03/08/18 15:59		

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

**Date Collected: 03/05/18 14:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:10	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

**Date Collected: 03/05/18 14:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 21:39	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		10	423343	03/13/18 13:55	KML	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 17:57	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:34	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:52		
					(End)	03/12/18 17:54		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B12 (10-15)**

**Lab Sample ID: 500-141780-3**

**Date Collected: 03/05/18 14:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 17:18	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 16:47	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:20	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:25	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:08	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 15:59		
					(End)	03/08/18 16:00		

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

**Date Collected: 03/05/18 14:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:24	PJ1	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

**Date Collected: 03/05/18 14:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 21:43	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 17:58	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:35	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:54		
					(End)	03/12/18 17:57		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B13 (0-5)**

**Lab Sample ID: 500-141780-4**

**Date Collected: 03/05/18 14:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 17:44	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/09/18 00:46	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:24	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:29	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:10	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:00		
					(End)	03/08/18 16:00		

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:29	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1	423234	03/12/18 21:47	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 17:59	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:40	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:57		
					(End)	03/12/18 17:59		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B14 (0-5)**

**Lab Sample ID: 500-141780-5**

**Date Collected: 03/05/18 14:35**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 84.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 18:09	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 17:14	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:28	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:12	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:00		
					(End)	03/08/18 16:00		

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:33	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 21:51	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:00	FXG	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:42	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 17:59		
					(End)	03/12/18 18:01		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B15 (0-5)**

**Lab Sample ID: 500-141780-6**

**Date Collected: 03/05/18 14:45**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 88.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 18:35	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/09/18 00:19	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:32	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:33	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:14	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:00		
					(End)	03/08/18 16:01		

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 21:56	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:01	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:43	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423199	03/12/18 18:01 (Start) 03/12/18 18:03 (End)	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B19 (0-5)**

**Lab Sample ID: 500-141780-7**

**Date Collected: 03/05/18 09:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 19:00	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 17:41	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:45	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:17	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
						(Start) 03/08/18 16:01 (End) 03/08/18 16:02		

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:00	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:02	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:45	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
						(Start) 03/12/18 18:03 (End) 03/12/18 18:05		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B20 (0-5)**

**Lab Sample ID: 500-141780-8**

**Date Collected: 03/05/18 11:10**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 19:26	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 18:07	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:49	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:24	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:02		
					(End)	03/08/18 16:02		

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:04	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:05	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:46	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:05		
					(End)	03/12/18 18:07		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 19:51	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 18:34	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:53	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B21 (0-5)**

**Lab Sample ID: 500-141780-9**

**Date Collected: 03/05/18 11:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 81.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	422882	03/09/18 09:26	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933	03/08/18 16:02	MAN	TAL CHI
					(Start)	03/08/18 16:02		
					(End)	03/08/18 16:02		

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

**Date Collected: 03/05/18 12:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:52	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:08	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:06	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:48	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:07		
					(End)	03/12/18 18:10		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

**Date Collected: 03/05/18 12:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 20:16	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 19:00	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 05:57	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:28	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B22 (0-5)**

**Lab Sample ID: 500-141780-10**

**Date Collected: 03/05/18 12:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9014		1	422933	03/08/18 16:02 (Start) 03/08/18 16:03 (End)	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

**Date Collected: 03/05/18 13:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 18:56	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:12	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:06	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:53	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199	03/12/18 18:10 (Start) 03/12/18 18:12 (End)	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B23 (0-5)**

**Lab Sample ID: 500-141780-11**

**Date Collected: 03/05/18 13:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 20:41	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 23:26	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:01	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:31	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933	03/08/18 16:03 (Start) 03/08/18 16:03 (End)	MAN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:24	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		10	423343	03/13/18 13:59	KML	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:07	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:55	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:12		
					(End)	03/12/18 18:14		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B24 (0-5)**

**Lab Sample ID: 500-141780-12**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 21:07	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 19:27	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:05	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:37	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:33	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:03		
					(End)	03/08/18 16:03		

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Analysis	6010B		1	423235	03/12/18 19:05	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:29	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		10	423343	03/13/18 14:15	KML	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:08	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:56	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:14		
					(End)	03/12/18 18:16		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B24 (0-5) Dup**

**Lab Sample ID: 500-141780-13**

**Date Collected: 03/05/18 09:55**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 21:32	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 19:54	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:09	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:42	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:36	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:03		
					(End)	03/08/18 16:04		

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

**Date Collected: 03/05/18 11:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

**Date Collected: 03/05/18 11:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:33	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:09	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 11:58	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:16		
					(End)	03/12/18 18:18		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B25 (0-5)**

**Lab Sample ID: 500-141780-14**

**Date Collected: 03/05/18 11:00**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 21:58	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 20:20	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:13	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:38	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
					(Start)	03/08/18 16:04		
					(End)	03/08/18 16:04		

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:37	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:10	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	7470A		1	423140	03/12/18 11:59	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199	03/12/18 18:18 (Start) 03/12/18 18:20 (End)	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B26 (0-5)**

**Lab Sample ID: 500-141780-15**

**Date Collected: 03/05/18 11:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422684	03/08/18 22:23	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 20:47	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:17	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:54	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:40	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933	03/08/18 16:04 (Start) 03/08/18 16:04 (End)	MAN	TAL CHI

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 19:29	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:41	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:11	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 12:01	EEN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
						(Start) 03/12/18 18:20		
						(End) 03/12/18 18:23		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B27 (0-5)**

**Lab Sample ID: 500-141780-16**

**Date Collected: 03/05/18 12:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 12:29	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 21:13	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:21	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:42	EEN	TAL CHI
Total/NA	Prep	9010B			422675	03/08/18 11:07	MAN	TAL CHI
Total/NA	Analysis	9014		1	422933		MAN	TAL CHI
						(Start) 03/08/18 16:04		
						(End) 03/08/18 16:05		

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

**Date Collected: 03/05/18 12:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:45	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:12	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 12:02	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
						(Start) 03/12/18 18:23		
						(End) 03/12/18 18:25		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B28 (0-5)**

**Lab Sample ID: 500-141780-17**

**Date Collected: 03/05/18 12:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 12:55	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 23:00	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:33	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 00:58	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:44	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:34		
					(End)	03/09/18 15:35		

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 19:38	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:50	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:13	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 12:04	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:25		
					(End)	03/12/18 18:27		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 13:20	DJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (0-5)**

**Lab Sample ID: 500-141780-18**

**Date Collected: 03/05/18 10:40**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 21:40	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:37	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 09:51	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:37		
					(End)	03/09/18 15:37		

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

**Date Collected: 03/05/18 10:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 19:43	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:54	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		10	423343	03/13/18 14:19	KML	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:44	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 12:06	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:27		
					(End)	03/12/18 18:29		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

**Date Collected: 03/05/18 10:50**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 13:45	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B29 (5-10)**

**Lab Sample ID: 500-141780-19**

Date Collected: 03/05/18 10:50

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	422736	03/08/18 22:06	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 06:41	PJ1	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI
Total/NA	Analysis	6010B		10	423234	03/13/18 01:02	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:00	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:37		
					(End)	03/09/18 15:37		

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

Date Collected: 03/05/18 12:05

Matrix: Solid

Date Received: 03/06/18 13:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422734	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422918	03/09/18 15:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 19:47	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6010B		1	423234	03/12/18 22:58	PJ1	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			422917	03/09/18 14:58	BDE	TAL CHI
TCLP	Analysis	6020A		1	423264	03/12/18 18:45	FXG	TAL CHI
TCLP	Leach	1311			422731	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			422894	03/09/18 12:10	EEN	TAL CHI
TCLP	Analysis	7470A		1	423140	03/12/18 12:07	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:29		
					(End)	03/12/18 18:31		
Total/NA	Analysis	Moisture		1	422563	03/07/18 14:52	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

Date Collected: 03/05/18 12:05

Matrix: Solid

Date Received: 03/06/18 13:09

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 14:10	DJD	TAL CHI
Total/NA	Prep	3541			422624	03/08/18 06:47	STW	TAL CHI
Total/NA	Analysis	8270D		1	422736	03/08/18 22:33	WDS	TAL CHI
Total/NA	Prep	3050B			422762	03/08/18 17:11	BDE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (0-5)**

**Lab Sample ID: 500-141780-20**

**Date Collected: 03/05/18 12:05**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 79.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	423061	03/10/18 06:45	PJ1	TAL CHI
Total/NA	Prep	7471B			422725	03/08/18 13:31	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:02	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929	(Start) 03/09/18 15:37 (End) 03/09/18 15:38	EAT	TAL CHI

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

**Date Collected: 03/05/18 12:15**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422735	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422920	03/09/18 15:01	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 12:43	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6010B		10	423494	03/14/18 11:05	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6010B		1	423427	03/13/18 14:40	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6020A		1	423473	03/14/18 10:01	PFK	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			423145	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 11:08	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199	(Start) 03/12/18 18:31 (End) 03/12/18 18:33	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	422569	03/07/18 15:03	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

**Date Collected: 03/05/18 12:15**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 14:36	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	422679	03/08/18 13:51	GLR	TAL CHI
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 00:46	PJ1	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B30 (5-10)**

**Lab Sample ID: 500-141780-21**

**Date Collected: 03/05/18 12:15**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		10	423236	03/13/18 03:47	PJ1	TAL CHI
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:09	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:38		
					(End)	03/09/18 15:38		

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

**Date Collected: 03/05/18 10:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422735	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422920	03/09/18 15:01	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 12:48	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6010B		1	423427	03/13/18 14:45	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6020A		1	423473	03/14/18 10:02	PFK	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			423145	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 11:10	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:33		
					(End)	03/12/18 18:36		
Total/NA	Analysis	Moisture		1	422569	03/07/18 15:03	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

**Date Collected: 03/05/18 10:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 15:01	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	422679	03/08/18 14:15	GLR	TAL CHI
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 01:07	PJ1	TAL CHI
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		10	423236	03/13/18 04:10	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (0-5)**

**Lab Sample ID: 500-141780-22**

**Date Collected: 03/05/18 10:20**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:11	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929	03/09/18 15:38	EAT	TAL CHI
					(Start)	03/09/18 15:38		
					(End)	03/09/18 15:39		

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			422735	03/08/18 13:54	JLC	TAL CHI
SPLP East	Prep	3010A			422920	03/09/18 15:01	BDE	TAL CHI
SPLP East	Analysis	6010B		1	423235	03/12/18 12:52	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6010B		10	423494	03/14/18 11:09	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6010B		1	423427	03/13/18 14:49	PJ1	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	3010A			423214	03/13/18 06:48	JEF	TAL CHI
TCLP	Analysis	6020A		1	423473	03/14/18 10:03	PFK	TAL CHI
TCLP	Leach	1311			422740	03/08/18 13:54	JLC	TAL CHI
TCLP	Prep	7470A			423145	03/12/18 12:30	EEN	TAL CHI
TCLP	Analysis	7470A		1	423309	03/13/18 11:11	EEN	TAL CHI
Total/NA	Analysis	9045D		1	423199		PFK	TAL CHI
					(Start)	03/12/18 18:38		
					(End)	03/12/18 18:40		
Total/NA	Analysis	Moisture		1	422569	03/07/18 15:03	LWN	TAL CHI

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			422508	03/06/18 18:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	422818	03/09/18 15:27	DJD	TAL CHI
Total/NA	Prep	3541			422599	03/07/18 17:47	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	422679	03/08/18 14:40	GLR	TAL CHI
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	423061	03/10/18 01:11	PJ1	TAL CHI
Total/NA	Prep	3050B			422645	03/08/18 07:44	JEF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

**Client Sample ID: 2490V2-3-B31 (5-10)**

**Lab Sample ID: 500-141780-23**

**Date Collected: 03/05/18 10:30**

**Matrix: Solid**

**Date Received: 03/06/18 13:09**

**Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		10	423236	03/13/18 04:15	PJ1	TAL CHI
Total/NA	Prep	7471B			422730	03/08/18 14:55	EEN	TAL CHI
Total/NA	Analysis	7471B		1	422882	03/09/18 10:18	EEN	TAL CHI
Total/NA	Prep	9010B			422712	03/08/18 15:20	EAT	TAL CHI
Total/NA	Analysis	9014		1	422929		EAT	TAL CHI
					(Start)	03/09/18 15:39		
					(End)	03/09/18 15:39		

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141780-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To *(optional)* Matt Weiss Bill To (optional)  
 Contact: Matt Weiss Contact: \_\_\_\_\_  
 Company: Terracon Company: \_\_\_\_\_  
 Address: 135 Ambassador Drive Address: \_\_\_\_\_  
 Address: Naperville IL Address: \_\_\_\_\_  
 Phone: 6304450160 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-Mail: matt.weiss@terracon.com PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141780  
 Chain of Custody Number: \_\_\_\_\_  
 Page 1 of 3  
 Temperature °C of Cooler: 2.3, 4.3, 3.1

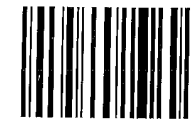
Client		Client Project #		Preservative		Parameter		Sample ID		Sampling		# of Containers	Matrix	Comments
Terracon		111870075						Date		Time				
Project Name		Work Order #45												
Project Location/State		Crystal Lake IL												
Sampler		Kyon J Peterson												
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOCs	SVOCs	Total TAL	PH	TCLP TAL	SPLP TAL	23 Iron	23 Iron
1		2490V2-3-B12(0-5)	3/5	1340	5	S	X	X	X	X	X	X	X	X
2		2490V2-3-B12(5-10)		1350										
3		2490V2-3-B12(5-15)		1400										
4		2490V2-3-B13(0-5)		1420										
5		2490V2-3-B14(0-5)		1435										
6		2490V2-3-B15(0-5)		1445										
7		2490V2-3-B19(0-5)		990										
8		2490V2-3-B20(0-5)		1110										
9		2490V2-3-B21(0-5)		1140										
10		2490V2-3-B22(0-5)		1240										



- Preservative Key
- HCL, Cool to 4°
  - H2SO4, Cool to 4°
  - HNO3, Cool to 4°
  - NaOH, Cool to 4°
  - NaOH/Zn, Cool to 4°
  - NaHSO4
  - Cool to 4°
  - None
  - Other

500-141780 COC

Elmhurst



503325

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days  10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Due Date: \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are returned longer than 1 month)

Relinquished By: <i>[Signature]</i> Company: Terracon Date: 3/5/18 Time: 1600	Received By: <i>[Signature]</i> Company: TA Date: 3/5/18 Time: 1600	Lab Courier: TA
Relinquished By: <i>[Signature]</i> Company: TA Date: 3/6/18 Time: 0830	Received By: <i>[Signature]</i> Company: TA Date: 3/6/18 Time: 0830	Shipped: _____
Relinquished By: <i>[Signature]</i> Company: TA Date: 3/6/18 Time: 0950	Received By: <i>[Signature]</i> Company: TA Date: 03/06/18 Time: 0950	Hand Delivered: _____

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments: \* No AL  
\* HOLD SPLP

Lab Comments: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: Matt Weiss  
 Company: Terracon  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141780  
 Chain of Custody Number: \_\_\_\_\_  
 Page 2 of 3  
 Temperature °C of Cooler: 2.3, 4.5

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
<u>Terracon</u>		<u>11182007B</u>								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
<u>Work Order #45</u>											
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
<u>Crystal Lake, IL</u>		<u>Evan S. Peterson</u>									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
11		<u>2490V2-3-B23(0-5)</u>	<u>3/5</u>	<u>1300</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
12		<u>2490V2-3-B24(0-5)</u>		<u>955</u>							
13		<u>2490V2-3-B24(0-5) DUP</u>		<u>955</u>							
14		<u>2490V2-3-B25(0-5)</u>		<u>1100</u>							
15		<u>2490V2-3-B26(0-5)</u>		<u>1130</u>							
16		<u>2490V2-3-B27(0-5)</u>		<u>1238</u>							
17		<u>2490V2-3-B28(0-5)</u>		<u>1250</u>							
18		<u>2490V2-3-B29(0-5)</u>		<u>1040</u>							
19		<u>2490V2-3-B29(5-10)</u>		<u>1050</u>							
20		<u>2490V2-3-B30(0-5)</u>		<u>1205</u>							



Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days X 10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Dispose by Lab  Archive for \_\_\_ Months (A fee)

Relinquished By <u>[Signature]</u>	Company <u>Terracon</u>	Date <u>3/5/18</u>	Time <u>1600</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>3/5/18</u>	Time <u>1600</u>
Relinquished By <u>[Signature]</u>	Company <u>TA</u>	Date <u>3/6/18</u>	Time <u>830</u>	Received By <u>P. Neal</u>	Company <u>TA</u>	Date <u>3/6/18</u>	Time <u>0830</u>
Relinquished By <u>P. Neal</u>	Company <u>TA</u>	Date <u>3/6/18</u>	Time <u>0950</u>	Received By <u>[Signature]</u>	Company <u>TALHE</u>	Date <u>3/6/18</u>	Time <u>0950</u>

Lab Courier: TA  
 Shipped: \_\_\_\_\_  
 Hand Delivered: \_\_\_\_\_

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
NO AL  
Hold SPLP

Lab Comments: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Math Weiss  
Contact: Math Weiss  
Company: Terracon  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-14780

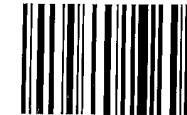
Chain of Custody Number: \_\_\_\_\_

Page 3 of 3

Temperature °C of Cooler: 31, 23, 43

Client		Client Project #		Preservative		Parameter		Sample		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix			Comments
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix			
Sampler		Lab PM		Date		Time		# of Containers		Matrix			
Client	<u>Terracon</u>	Client Project #	<u>11187007B</u>	Preservative		Parameter		Sample		Matrix			
Project Name	<u>Work Order #45</u>	Lab Project #		Date		Time		# of Containers		Matrix			
Project Location/State	<u>Crystal Lake IL</u>	Lab PM		Date		Time		# of Containers		Matrix			
Sampler	<u>Kym J Peterson</u>	Lab PM		Date		Time		# of Containers		Matrix			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix							
<u>21</u>		<u>2490V2-3-B30(5-10)</u>	<u>3/5</u>	<u>1215</u>	<u>55</u>	<u>NOCs</u>							
<u>22</u>		<u>2490V2-3-B31(0-5)</u>	<u>↓</u>	<u>1020</u>	<u>↓</u>	<u>SOILs</u>							
<u>23</u>		<u>2490V2-3-B31(5-10)</u>	<u>↓</u>	<u>1030</u>	<u>↓</u>	<u>Total TAL</u>	<u>23 Inorg.</u>	<u>AM</u>	<u>TCUP TAL</u>	<u>23 Inorg.</u>	<u>SPLP TAL</u>	<u>23 Inorg.</u>	

Elmhurst



503325

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<u>[Signature]</u>	<u>Terracon</u>	<u>3/5/18</u>	<u>1600</u>	<u>[Signature]</u>	<u>TA</u>	<u>3/5/18</u>	<u>1600</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<u>[Signature]</u>	<u>TA</u>	<u>3/6/18</u>	<u>0830</u>	<u>[Signature]</u>	<u>TA</u>	<u>3/6/18</u>	<u>0830</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<u>[Signature]</u>	<u>TA</u>	<u>3/6/18</u>	<u>0950</u>	<u>[Signature]</u>	<u>TA/ME</u>	<u>03/06/18</u>	<u>0950</u>

Lab Courier: TA

Shipped: \_\_\_\_\_

Hand Delivered: \_\_\_\_\_

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

\* NO AL  
\* Hold SPLP

Lab Comments:

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141780-1

**Login Number: 141780**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3, 4.3, 3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

IL Route 176 (Westbound) IDOT STA 498+30 to 500+00 (ISGS Site 2490V2-4)

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor R

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Soil from boring B01 was sampled adjacent to ISGS Site No 2490V2-4.  
See Exhibits 2, 2A, and Table 7 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141818-4.  
Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

*Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))*

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

Matt Weiss  
 Printed Name:

[Signature]  
 Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:

10/12/18  
 Date:



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-4)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 1 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-4-B01 (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/6/2018
<b>Volatile Organic Analytical Parameters</b>						
Acetone	mg/kg	---	---	25		0.023
<b>Semivolatile Organic Analytical Parameters</b>						
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.03
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.043
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.063
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.037
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.027
Chrysene	mg/kg	1.2	2.7	88		0.04
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.007
Fluoranthene	mg/kg	2.7	4.1	3100		0.069
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.032
Phenanthrene	mg/kg	1.3	2.5	210		0.011
Pyrene	mg/kg	1.9	3.0	2300		0.042
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		4.6
Barium	mg/kg	---	110	1500		36
Cadmium	mg/kg	---	0.6	5.2		0.12
Chromium, total	mg/kg	---	16.2	21		11
Lead	mg/kg	---	36	107		12
Mercury	mg/kg	---	0.06	0.1		0.019
Selenium	mg/kg	---	0.48	1.3		0.44
Silver	mg/kg	---	0.55	4.4		<0.27
Antimony	mg/kg	---	4.0	5		<1.1
Beryllium	mg/kg	---	0.59	22		0.47
Calcium	mg/kg	---	9,300	---		32000
Cobalt	mg/kg	---	8.9	20		7.1
Copper	mg/kg	---	19.6	2900		14
Cyanide	mg/kg	---	0.51	---		<0.49
Iron	mg/kg	---	15,900	15000		13000
Magnesium	mg/kg	---	4,820	325000		18000
Manganese	mg/kg	---	636	630		290
Nickel	mg/kg	---	18	100		15
Potassium	mg/kg	---	1,268	---		1100
Sodium	mg/kg	---	130	---		890
Thallium	mg/kg	---	0.32	2.6		<0.54
Vanadium	mg/kg	---	25.2	550		21
Zinc	mg/kg	---	95	5100		39
pH			6.25	9		7.8

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-4)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 2 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-4-B01 (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/6/2018
<b>Inorganic Analytical Parameters (SPLP)</b>						
Antimony,SPLP	mg/L	---	---	---		-
Arsenic,SPLP	mg/L	---	---	---		--
Barium,SPLP	mg/L	---	---	---		--
Beryllium,SPLP	mg/L	---	---	---		--
Cadmium,SPLP	mg/L	---	---	---		--
Calcium,SPLP	mg/L	---	---	---		--
Chromium,SPLP	mg/L	---	---	---		--
Cobalt,SPLP	mg/L	---	---	---		--
Copper,SPLP	mg/L	---	---	---		--
Iron,SPLP	mg/L	---	---	---		--
Lead,SPLP	mg/L	---	---	---		--
Magnesium,SPLP	mg/L	---	---	---		--
Manganese,SPLP	mg/L	---	---	---		0.97
Mercury,SPLP	mg/L	---	---	---		--
Nickel,SPLP	mg/L	---	---	---		--
Potassium,SPLP	mg/L	---	---	---		--
Selenium,SPLP	mg/L	---	---	---		--
Silver,SPLP	mg/L	---	---	---		--
Sodium,SPLP	mg/L	---	---	---		--
Thallium,SPLP	mg/L	---	---	---		--
Vanadium,SPLP	mg/L	---	---	---		--
Zinc,SPLP	mg/L	---	---	---		--
Cyanide,SPLP	mg/L	---	---	---		--
<b>Inorganic Analytical Parameters (TCLP)</b>						
Arsenic,TCLP	mg/L	---	---	---		<0.050
Barium,TCLP	mg/L	---	---	---		0.35
Cadmium,TCLP	mg/L	---	---	---		<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050
Silver,TCLP	mg/L	---	---	---		<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		440
Cobalt,TCLP	mg/L	---	---	---		<0.025
Copper,TCLP	mg/L	---	---	---		<0.025
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.40
Magnesium,TCLP	mg/L	---	---	---		100
Manganese,TCLP	mg/L	---	---	---		2.6
Nickel,TCLP	mg/L	---	---	---		0.012
Potassium,TCLP	mg/L	---	---	---		0.9
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025
Zinc,TCLP	mg/L	---	---	---		0.026

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-141818-2  
Client Project/Site: IDOT - Crystal Lake - WO45

For:  
Terracon Consulting Eng & Scientists  
135 Ambassador Drive  
Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:  
3/16/2018 3:26:42 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

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7

8

9

10



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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Job ID: 500-141818-2**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141818-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 9:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.6° C, 2.9° C and 3.1° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422818: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

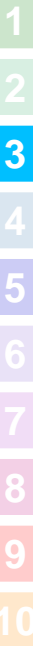
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Client Sample ID: 2490V2-4-B01 (0-5.5)**

**Lab Sample ID: 500-141818-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.023		0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.030	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.043		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.063		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.037		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.027	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0070	J	0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.069		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.032	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.011	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.042		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.6		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Calcium	32000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.44	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Sodium	890		54	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	440		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	100		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.90	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.026	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.97		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.016	0.0054	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141818-4	2490V2-4-B01 (0-5.5)	Solid	03/06/18 13:30	03/07/18 09:23

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1

2

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Client Sample ID: 2490V2-4-B01 (0-5.5)**

**Lab Sample ID: 500-141818-4**

**Date Collected: 03/06/18 13:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.5**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.023</b>		0.017	0.0072	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Carbon disulfide	<0.0042		0.0042	0.00086	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131	03/07/18 16:00	03/09/18 17:08	1
Dibromofluoromethane	94		75 - 126	03/07/18 16:00	03/09/18 17:08	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	03/07/18 16:00	03/09/18 17:08	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/09/18 17:08	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
<b>Benzo[a]anthracene</b>	<b>0.030</b>	<b>J</b>	0.036	0.0049	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Client Sample ID: 2490V2-4-B01 (0-5.5)**

**Lab Sample ID: 500-141818-4**

**Date Collected: 03/06/18 13:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.043		0.036	0.0070	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Benzo[b]fluoranthene	0.063		0.036	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Benzo[g,h,i]perylene	0.037		0.036	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Benzo[k]fluoranthene	0.027	J	0.036	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Chrysene	0.040		0.036	0.0099	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Dibenz(a,h)anthracene	0.0070	J	0.036	0.0070	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Fluoranthene	0.069		0.036	0.0067	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Indeno[1,2,3-cd]pyrene	0.032	J	0.036	0.0094	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Client Sample ID: 2490V2-4-B01 (0-5.5)**

**Lab Sample ID: 500-141818-4**

**Date Collected: 03/06/18 13:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
<b>Phenanthrene</b>	<b>0.011</b>	<b>J</b>	0.036	0.0050	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
<b>Pyrene</b>	<b>0.042</b>		0.036	0.0072	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		44 - 121	03/08/18 16:50	03/09/18 15:44	1
2-Fluorophenol	92		46 - 133	03/08/18 16:50	03/09/18 15:44	1
Nitrobenzene-d5	84		41 - 120	03/08/18 16:50	03/09/18 15:44	1
Phenol-d5	87		46 - 125	03/08/18 16:50	03/09/18 15:44	1
Terphenyl-d14	80		35 - 160	03/08/18 16:50	03/09/18 15:44	1
2,4,6-Tribromophenol	117		25 - 139	03/08/18 16:50	03/09/18 15:44	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Arsenic</b>	<b>4.6</b>		0.54	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Barium</b>	<b>36</b>		0.54	0.062	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Beryllium</b>	<b>0.47</b>		0.22	0.051	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Cadmium</b>	<b>0.12</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Chromium</b>	<b>11</b>		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Cobalt</b>	<b>7.1</b>		0.27	0.071	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Copper</b>	<b>14</b>		0.54	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Iron</b>	<b>13000</b>		11	5.7	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Lead</b>	<b>12</b>		0.27	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Magnesium</b>	<b>18000</b>		5.4	2.7	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Calcium</b>	<b>32000</b>	<b>B</b>	11	1.8	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Manganese</b>	<b>290</b>		0.54	0.079	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Nickel</b>	<b>15</b>		0.54	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Selenium</b>	<b>0.44</b>	<b>J</b>	0.54	0.32	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
Silver	<0.27		0.27	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Vanadium</b>	<b>21</b>		0.27	0.064	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Zinc</b>	<b>39</b>		1.1	0.48	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Potassium</b>	<b>1100</b>		27	9.6	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1
<b>Sodium</b>	<b>890</b>		54	8.1	mg/Kg	☼	03/08/18 17:17	03/09/18 16:37	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Barium</b>	<b>0.35</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

**Client Sample ID: 2490V2-4-B01 (0-5.5)**

**Lab Sample ID: 500-141818-4**

**Date Collected: 03/06/18 13:30**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 88.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>440</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:30	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Magnesium</b>	<b>100</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Manganese</b>	<b>2.6</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Nickel</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Potassium</b>	<b>0.90</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:30	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:30	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:30	1
<b>Zinc</b>	<b>0.026</b>	<b>J</b>	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:30	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.97</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:37	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:42	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:06	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.016	0.0054	mg/Kg	☼	03/09/18 15:15	03/12/18 13:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	03/08/18 15:20	03/09/18 15:42	1
<b>pH</b>	<b>7.8</b>		0.20	0.20	SU			03/08/18 15:16	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-2

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Matt Weiss  
 Contact: Terracon  
 Company: Naperville  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141818  
 Chain of Custody Number: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: 26, 3, 12, 9

Client		Client Project #		Preservative		Parameter												Preservative Key	
<u>Terracon</u>		<u>111870078</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #																	
<u>Work Order #45</u>																			
Project Location/State		Lab PM																	
<u>Crystal Lake IL</u>		<u>Ryan J Peterson</u>																	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Vols	SUDCs	TOTAL TAL	Zn Energy	PH	TCLP TAL	23 Imp.	SPLP TAL	27 Energy	Comments			
			Date	Time															
<u>4</u>		<u>2490VZ-4-B01(05.5)</u>	<u>3/6</u>	<u>1330</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				

Elmhurst  
  
 503325

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days X 10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Received By <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/6/18</u> Time: <u>1600</u>
Relinquished By <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>830</u>	Received By <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0830</u>
Relinquished By <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0923</u>	Received By <u>Aimee Sweeney</u> Company: <u>TALNE</u> Date: <u>03/10/18</u> Time: <u>0923</u>

Lab Courier: TA  
 Shipped: \_\_\_\_\_  
 Hand Delivered: \_\_\_\_\_

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - W/pe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
\* No AL  
\* Hold SPLP

Lab Comments: \_\_\_\_\_



## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141818-2

**Login Number: 141818**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6, 2.9, 3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

IL Route 176 (Eastbound) IDOT STA 498+10 to 501+50 (ISGS Site 2490V2-8)

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: \_\_\_\_\_ BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Soil from borings B01 and B02 was sampled adjacent to ISGS Site No 2490V2-8.  
See Exhibits 2, 2A, 3, and 3A and Table 9 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141878-3.  
Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

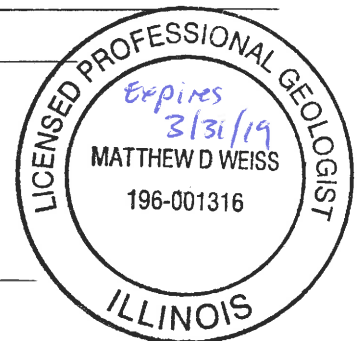
Matt Weiss  
 Printed Name:

[Signature]

10/12/18

Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:

Date:



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A  
Preliminary Site Investigation  
FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-8)  
Crystal Lake, IL  
Terracon Project No. 11187007B  
Page 1 of 4

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-8-B01 (0-5.5)	2490V2-8-B01 DUP (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/7/2018	3/7/2018
<b>Volatile Organic Analytical Parameters</b>							
Acetone	mg/kg	---	---	25		<0.015	<0.018
2-Butanone	mg/kg	---	---	17		<0.0037	<0.0045
<b>Semivolatile Organic Analytical Parameters</b>							
Anthracene	mg/kg	0.25	0.4	12000		0.014	0.011
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.095	0.074
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.092	0.095
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.13	0.14
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.072	0.08
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.053	0.051
Chrysene	mg/kg	1.2	2.7	88		0.1	0.099
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.017	0.016
Fluoranthene	mg/kg	2.7	4.1	3100		0.24	0.19
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.064	0.067
Phenanthrene	mg/kg	1.3	2.5	210		0.068	0.062
Pyrene	mg/kg	1.9	3.0	2300		0.15	0.12
<b>Inorganic Analytical Parameters</b>							
Arsenic	mg/kg	---	13	11.3		5.3	4.4
Barium	mg/kg	---	110	1500		55	48
Cadmium	mg/kg	---	0.6	5.2		0.2	0.16
Chromium, total	mg/kg	---	16.2	21		16	14
Lead	mg/kg	---	36	107		18	18
Mercury	mg/kg	---	0.06	0.1		0.017	0.019
Selenium	mg/kg	---	0.48	1.3		0.66	<0.59
Silver	mg/kg	---	0.55	4.4		<0.28	<0.29
Antimony	mg/kg	---	4.0	5		<1.1	<1.2
Beryllium	mg/kg	---	0.59	22		0.62	0.55
Calcium	mg/kg	---	9,300	---		29000	30000
Cobalt	mg/kg	---	8.9	20		9.7	8.4
Copper	mg/kg	---	19.6	2900		19	16
Cyanide	mg/kg	---	0.51	---		<0.56	<0.60
Iron	mg/kg	---	15,900	15000		16000	14000
Magnesium	mg/kg	---	4,820	325000		18000	18000
Manganese	mg/kg	---	636	630		470	290
Nickel	mg/kg	---	18	100		19	17
Potassium	mg/kg	---	1,268	---		1400	1200
Sodium	mg/kg	---	130	---		2100	1800
Thallium	mg/kg	---	0.32	2.6		<0.56	<0.59
Vanadium	mg/kg	---	25.2	550		24	21
Zinc	mg/kg	---	95	5100		59	51
pH			6.25	9		7.9	7.9

Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-8)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 2 of 4

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-8-B01 (0-5.5)	2490V2-8-B01 DUP (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/7/2018	3/7/2018
<b>Inorganic Analytical Parameters (SPLP)</b>							
Antimony,SPLP	mg/L	---	---	---		-	-
Arsenic,SPLP	mg/L	---	---	---		--	--
Barium,SPLP	mg/L	---	---	---		--	--
Beryllium,SPLP	mg/L	---	---	---		--	--
Cadmium,SPLP	mg/L	---	---	---		--	--
Calcium,SPLP	mg/L	---	---	---		--	--
Chromium,SPLP	mg/L	---	---	---		--	--
Cobalt,SPLP	mg/L	---	---	---		--	--
Copper,SPLP	mg/L	---	---	---		--	--
Iron,SPLP	mg/L	---	---	---		--	--
Lead,SPLP	mg/L	---	---	---		--	--
Magnesium,SPLP	mg/L	---	---	---		--	--
Manganese,SPLP	mg/L	---	---	---		1.7	1.8
Mercury,SPLP	mg/L	---	---	---		--	--
Nickel,SPLP	mg/L	---	---	---		--	--
Potassium,SPLP	mg/L	---	---	---		--	--
Selenium,SPLP	mg/L	---	---	---		--	--
Silver,SPLP	mg/L	---	---	---		--	--
Sodium,SPLP	mg/L	---	---	---		--	--
Thallium,SPLP	mg/L	---	---	---		--	--
Vanadium,SPLP	mg/L	---	---	---		--	--
Zinc,SPLP	mg/L	---	---	---		--	--
Cyanide,SPLP	mg/L	---	---	---		--	--
<b>Inorganic Analytical Parameters (TCLP)</b>							
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.34	0.37
Cadmium,TCLP	mg/L	---	---	---		0.0024	0.0027
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		400	370
Cobalt,TCLP	mg/L	---	---	---		<0.025	0.019
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		93	110
Manganese,TCLP	mg/L	---	---	---		3.7	5.1
Nickel,TCLP	mg/L	---	---	---		0.011	0.014
Potassium,TCLP	mg/L	---	---	---		0.74	0.76
Sodium,TCLP	mg/L	---	---	---		--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		0.053	0.042

**Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A**  
**Preliminary Site Investigation**  
**FAP 335 - IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-8)**  
**Crystal Lake, IL**  
**Terracon Project No. 11187007B**  
**Page 3 of 4**

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-8-B02 (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/7/2018
<b>Volatile Organic Analytical Parameters</b>						
Acetone	mg/kg	---	---	25		0.045
2-Butanone	mg/kg	---	---	17		0.011
<b>Semivolatile Organic Analytical Parameters</b>						
Anthracene	mg/kg	0.25	0.4	12000		<0.042
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.019
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.026
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.041
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.025
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.015
Chrysene	mg/kg	1.2	2.7	88		0.031
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.042
Fluoranthene	mg/kg	2.7	4.1	3100		0.049
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.02
Phenanthrene	mg/kg	1.3	2.5	210		0.015
Pyrene	mg/kg	1.9	3.0	2300		0.032
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		4.7
Barium	mg/kg	---	110	1500		51
Cadmium	mg/kg	---	0.6	5.2		0.31
Chromium, total	mg/kg	---	16.2	21		16
Lead	mg/kg	---	36	107		64
Mercury	mg/kg	---	0.06	0.1		0.034
Selenium	mg/kg	---	0.48	1.3		0.43
Silver	mg/kg	---	0.55	4.4		<0.30
Antimony	mg/kg	---	4.0	5		<1.2
Beryllium	mg/kg	---	0.59	22		0.56
Calcium	mg/kg	---	9,300	---		31000
Cobalt	mg/kg	---	8.9	20		8
Copper	mg/kg	---	19.6	2900		23
Cyanide	mg/kg	---	0.51	---		<0.62
Iron	mg/kg	---	15,900	15000		14000
Magnesium	mg/kg	---	4,820	325000		18000
Manganese	mg/kg	---	636	630		340
Nickel	mg/kg	---	18	100		19
Potassium	mg/kg	---	1,268	---		1300
Sodium	mg/kg	---	130	---		1600
Thallium	mg/kg	---	0.32	2.6		<0.59
Vanadium	mg/kg	---	25.2	550		22
Zinc	mg/kg	---	95	5100		69
pH			6.25	9		7.4

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-8-B02 (0-5.5)
				CCDD	Sample Depth (feet)	0-5.5
		Chicago	MSAs	mg/kg pH 6.25-9.0	Date Collected	3/7/2018
<b>Inorganic Analytical Parameters (SPLP)</b>						
Antimony,SPLP	mg/L	---	---	---		-
Arsenic,SPLP	mg/L	---	---	---		--
Barium,SPLP	mg/L	---	---	---		--
Beryllium,SPLP	mg/L	---	---	---		--
Cadmium,SPLP	mg/L	---	---	---		--
Calcium,SPLP	mg/L	---	---	---		--
Chromium,SPLP	mg/L	---	---	---		--
Cobalt,SPLP	mg/L	---	---	---		--
Copper,SPLP	mg/L	---	---	---		--
Iron,SPLP	mg/L	---	---	---		--
Lead,SPLP	mg/L	---	---	---		--
Magnesium,SPLP	mg/L	---	---	---		--
Manganese,SPLP	mg/L	---	---	---		0.93
Mercury,SPLP	mg/L	---	---	---		--
Nickel,SPLP	mg/L	---	---	---		--
Potassium,SPLP	mg/L	---	---	---		--
Selenium,SPLP	mg/L	---	---	---		--
Silver,SPLP	mg/L	---	---	---		--
Sodium,SPLP	mg/L	---	---	---		--
Thallium,SPLP	mg/L	---	---	---		--
Vanadium,SPLP	mg/L	---	---	---		--
Zinc,SPLP	mg/L	---	---	---		--
Cyanide,SPLP	mg/L	---	---	---		--
<b>Inorganic Analytical Parameters (TCLP)</b>						
Arsenic,TCLP	mg/L	---	---	---		<0.050
Barium,TCLP	mg/L	---	---	---		0.4
Cadmium,TCLP	mg/L	---	---	---		0.002
Chromium,TCLP	mg/L	---	---	---		<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050
Silver,TCLP	mg/L	---	---	---		<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		270
Cobalt,TCLP	mg/L	---	---	---		0.01
Copper,TCLP	mg/L	---	---	---		0.013
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.40
Magnesium,TCLP	mg/L	---	---	---		130
Manganese,TCLP	mg/L	---	---	---		5.3
Nickel,TCLP	mg/L	---	---	---		<0.025
Potassium,TCLP	mg/L	---	---	---		1.1
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025
Zinc,TCLP	mg/L	---	---	---		0.17

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141878-3

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/19/2018 2:07:01 PM

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Job ID: 500-141878-3**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141878-3

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 2:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422971: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5)**

**Lab Sample ID: 500-141878-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.014	J	0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.095		0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.092		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.13		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.072		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.053		0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.10		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.017	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.24		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.064		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.068		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.15		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	55		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.7		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		28	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	2100		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	400		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	93		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	3.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.74	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.053	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup**

**Lab Sample ID: 500-141878-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.011	J	0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.074		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.095		0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.080		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup (Continued)**

**Lab Sample ID: 500-141878-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.051		0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.099		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.016	J	0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.19		0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.067		0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.062		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.12		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.4		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.4		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	1800		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.37	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	370		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	5.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.76	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.042	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-8-B02 (0-5.5)**

**Lab Sample ID: 500-141878-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.045		0.023	0.010	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.011		0.0057	0.0026	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.019	J	0.042	0.0057	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.042	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.041	J	0.042	0.0091	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.042	0.014	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.015	J	0.042	0.012	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.042	0.012	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.049		0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.020	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B02 (0-5.5) (Continued)**

**Lab Sample ID: 500-141878-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.015	J	0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.032	J	0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.7		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	51		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.0		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	64		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	31000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	69		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		30	11	mg/Kg	1	☼	6010B	Total/NA
Sodium	1600		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	270		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	5.3		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.1	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.17	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.93	F1	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141878-5	2490V2-8-B01 (0-5.5)	Solid	03/07/18 10:30	03/07/18 14:45
500-141878-6	2490V2-8-B01 (0-5.5) Dup	Solid	03/07/18 10:30	03/07/18 14:45
500-141878-7	2490V2-8-B02 (0-5.5)	Solid	03/07/18 10:40	03/07/18 14:45

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5)**

**Lab Sample ID: 500-141878-5**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.0**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	03/07/18 16:00	03/10/18 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/07/18 16:00	03/10/18 16:49	1
Dibromofluoromethane	91		75 - 126	03/07/18 16:00	03/10/18 16:49	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/10/18 16:49	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 16:49	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Anthracene</b>	<b>0.014</b>	<b>J</b>	0.039	0.0065	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Benzo[a]anthracene</b>	<b>0.095</b>		0.039	0.0053	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5)**

**Lab Sample ID: 500-141878-5**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.092</b>		0.039	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Benzo[b]fluoranthene</b>	<b>0.13</b>		0.039	0.0084	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Benzo[g,h,i]perylene</b>	<b>0.072</b>		0.039	0.013	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Benzo[k]fluoranthene</b>	<b>0.053</b>		0.039	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Chrysene</b>	<b>0.10</b>		0.039	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Dibenz(a,h)anthracene</b>	<b>0.017 J</b>		0.039	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4-Dinitrophenol	<0.79 *		0.79	0.69	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Fluoranthene</b>	<b>0.24</b>		0.039	0.0073	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.064</b>		0.039	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5)**

**Lab Sample ID: 500-141878-5**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.0**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Phenanthrene</b>	<b>0.068</b>		0.039	0.0055	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
<b>Pyrene</b>	<b>0.15</b>		0.039	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		44 - 121	03/08/18 16:50	03/09/18 14:25	1
2-Fluorophenol	90		46 - 133	03/08/18 16:50	03/09/18 14:25	1
Nitrobenzene-d5	78		41 - 120	03/08/18 16:50	03/09/18 14:25	1
Phenol-d5	79		46 - 125	03/08/18 16:50	03/09/18 14:25	1
Terphenyl-d14	71		35 - 160	03/08/18 16:50	03/09/18 14:25	1
2,4,6-Tribromophenol	92		25 - 139	03/08/18 16:50	03/09/18 14:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Arsenic</b>	<b>5.3</b>		0.56	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Barium</b>	<b>55</b>		0.56	0.064	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Beryllium</b>	<b>0.62</b>		0.23	0.053	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Cadmium</b>	<b>0.20</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Cobalt</b>	<b>9.7</b>		0.28	0.074	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Copper</b>	<b>19</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Iron</b>	<b>16000</b>		11	5.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Lead</b>	<b>18</b>		0.28	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Magnesium</b>	<b>18000</b>		5.6	2.8	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Calcium</b>	<b>29000</b>	<b>B</b>	11	1.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Manganese</b>	<b>470</b>		0.56	0.082	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Nickel</b>	<b>19</b>		0.56	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Selenium</b>	<b>0.66</b>		0.56	0.33	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
Silver	<0.28		0.28	0.073	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Vanadium</b>	<b>24</b>		0.28	0.066	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Zinc</b>	<b>59</b>		1.1	0.49	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Potassium</b>	<b>1400</b>		28	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1
<b>Sodium</b>	<b>2100</b>		56	8.3	mg/Kg	☼	03/08/18 17:17	03/09/18 17:19	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Barium</b>	<b>0.34</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 19:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Cadmium</b>	<b>0.0024</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 19:09	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5)**

**Lab Sample ID: 500-141878-5**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 84.0**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>400</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 19:09	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 19:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Magnesium</b>	<b>93</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Manganese</b>	<b>3.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Nickel</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Potassium</b>	<b>0.74</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:09	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 19:09	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:09	1
<b>Zinc</b>	<b>0.053</b>	<b>J</b>	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 19:09	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.7</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:19	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:49	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:17	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.017</b>	<b>J</b>	0.018	0.0059	mg/Kg	☼	03/09/18 15:15	03/12/18 13:33	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	03/15/18 10:15	03/15/18 15:44	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 15:28	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup**

**Lab Sample ID: 500-141878-6**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 82.4**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		75 - 131	03/07/18 16:00	03/10/18 17:14	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/10/18 17:14	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/10/18 17:14	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/10/18 17:14	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	0.040	0.0067	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
<b>Benzo[a]anthracene</b>	<b>0.074</b>		0.040	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup**

**Lab Sample ID: 500-141878-6**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 82.4**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.095		0.040	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Benzo[b]fluoranthene	0.14		0.040	0.0087	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Benzo[g,h,i]perylene	0.080		0.040	0.013	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Benzo[k]fluoranthene	0.051		0.040	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Chrysene	0.099		0.040	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Dibenz(a,h)anthracene	0.016	J	0.040	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Fluoranthene	0.19		0.040	0.0075	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Indeno[1,2,3-cd]pyrene	0.067		0.040	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup**

**Lab Sample ID: 500-141878-6**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 82.4**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
<b>Phenanthrene</b>	<b>0.062</b>		0.040	0.0056	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
<b>Pyrene</b>	<b>0.12</b>		0.040	0.0080	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	102		44 - 121	03/08/18 16:50	03/09/18 14:51	1
2-Fluorophenol	103		46 - 133	03/08/18 16:50	03/09/18 14:51	1
Nitrobenzene-d5	90		41 - 120	03/08/18 16:50	03/09/18 14:51	1
Phenol-d5	97		46 - 125	03/08/18 16:50	03/09/18 14:51	1
Terphenyl-d14	89		35 - 160	03/08/18 16:50	03/09/18 14:51	1
2,4,6-Tribromophenol	123		25 - 139	03/08/18 16:50	03/09/18 14:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Arsenic</b>	<b>4.4</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Barium</b>	<b>48</b>		0.59	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Beryllium</b>	<b>0.55</b>		0.23	0.055	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Cadmium</b>	<b>0.16</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Chromium</b>	<b>14</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Cobalt</b>	<b>8.4</b>		0.29	0.077	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Copper</b>	<b>16</b>		0.59	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Iron</b>	<b>14000</b>		12	6.1	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Lead</b>	<b>18</b>		0.29	0.14	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Magnesium</b>	<b>18000</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Calcium</b>	<b>30000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Manganese</b>	<b>290</b>		0.59	0.085	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Nickel</b>	<b>17</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
Silver	<0.29		0.29	0.076	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Vanadium</b>	<b>21</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Zinc</b>	<b>51</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Potassium</b>	<b>1200</b>		29	10	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1
<b>Sodium</b>	<b>1800</b>		59	8.7	mg/Kg	☼	03/08/18 17:17	03/09/18 17:24	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Barium</b>	<b>0.37</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 19:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Cadmium</b>	<b>0.0027</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 19:14	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B01 (0-5.5) Dup**

**Lab Sample ID: 500-141878-6**

**Date Collected: 03/07/18 10:30**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 82.4**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>370</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 19:14	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Cobalt</b>	<b>0.019</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 19:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Manganese</b>	<b>5.1</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Nickel</b>	<b>0.014</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Potassium</b>	<b>0.76</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:14	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 19:14	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:14	1
<b>Zinc</b>	<b>0.042</b>	<b>J</b>	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 19:14	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.8</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:24	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:50	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:22	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>	<b>J</b>	0.020	0.0065	mg/Kg	☼	03/09/18 15:15	03/12/18 13:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	03/15/18 10:15	03/15/18 15:45	1
<b>pH</b>	<b>7.9</b>		0.20	0.20	SU			03/13/18 15:31	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B02 (0-5.5)**

**Lab Sample ID: 500-141878-7**

**Date Collected: 03/07/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 77.2**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.045</b>		0.023	0.010	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Benzene	<0.0023		0.0023	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Bromodichloromethane	<0.0023		0.0023	0.00047	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Bromoform	<0.0023		0.0023	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Bromomethane	<0.0057		0.0057	0.0022	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
<b>2-Butanone (MEK)</b>	<b>0.011</b>		0.0057	0.0026	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Carbon disulfide	<0.0057		0.0057	0.0012	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Carbon tetrachloride	<0.0023		0.0023	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Chlorobenzene	<0.0023		0.0023	0.00085	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Chloroethane	<0.0057 *		0.0057	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Chloroform	<0.0023		0.0023	0.00080	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Chloromethane	<0.0057		0.0057	0.0023	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00064	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00069	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Dibromochloromethane	<0.0023		0.0023	0.00075	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,1-Dichloroethane	<0.0023		0.0023	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,2-Dichloroethane	<0.0057		0.0057	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,1-Dichloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,2-Dichloropropane	<0.0023		0.0023	0.00059	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,3-Dichloropropane, Total	<0.0023		0.0023	0.00081	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
2-Hexanone	<0.0057		0.0057	0.0018	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Methylene Chloride	<0.0057		0.0057	0.0023	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
4-Methyl-2-pentanone (MIBK)	<0.0057		0.0057	0.0017	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00067	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Styrene	<0.0023		0.0023	0.00069	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00073	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Tetrachloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Toluene	<0.0023		0.0023	0.00058	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00081	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,1,1-Trichloroethane	<0.0023		0.0023	0.00077	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00099	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Trichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Vinyl acetate	<0.0057		0.0057	0.0020	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1
Xylenes, Total	<0.0046		0.0046	0.00074	mg/Kg	☼	03/07/18 16:00	03/10/18 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/10/18 17:40	1
Dibromofluoromethane	93		75 - 126	03/07/18 16:00	03/10/18 17:40	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	03/07/18 16:00	03/10/18 17:40	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/10/18 17:40	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Benzo[a]anthracene</b>	<b>0.019 J</b>		0.042	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B02 (0-5.5)**

**Lab Sample ID: 500-141878-7**

**Date Collected: 03/07/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 77.2**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.026</b>	<b>J</b>	0.042	0.0082	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Benzo[b]fluoranthene</b>	<b>0.041</b>	<b>J</b>	0.042	0.0091	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Benzo[g,h,i]perylene</b>	<b>0.025</b>	<b>J</b>	0.042	0.014	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Benzo[k]fluoranthene</b>	<b>0.015</b>	<b>J</b>	0.042	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Chrysene</b>	<b>0.031</b>	<b>J</b>	0.042	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4-Dinitrophenol	<0.85	*	0.85	0.75	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Fluoranthene</b>	<b>0.049</b>		0.042	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.020</b>	<b>J</b>	0.042	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B02 (0-5.5)**

**Lab Sample ID: 500-141878-7**

**Date Collected: 03/07/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 77.2**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Phenanthrene</b>	<b>0.015</b>	<b>J</b>	0.042	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
<b>Pyrene</b>	<b>0.032</b>	<b>J</b>	0.042	0.0084	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		44 - 121	03/08/18 16:50	03/09/18 15:18	1
2-Fluorophenol	96		46 - 133	03/08/18 16:50	03/09/18 15:18	1
Nitrobenzene-d5	83		41 - 120	03/08/18 16:50	03/09/18 15:18	1
Phenol-d5	92		46 - 125	03/08/18 16:50	03/09/18 15:18	1
Terphenyl-d14	76		35 - 160	03/08/18 16:50	03/09/18 15:18	1
2,4,6-Tribromophenol	115		25 - 139	03/08/18 16:50	03/09/18 15:18	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Arsenic</b>	<b>4.7</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Barium</b>	<b>51</b>		0.59	0.068	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Beryllium</b>	<b>0.56</b>		0.24	0.055	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Cadmium</b>	<b>0.31</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Chromium</b>	<b>16</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Cobalt</b>	<b>8.0</b>		0.30	0.078	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Copper</b>	<b>23</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Iron</b>	<b>14000</b>		12	6.2	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Lead</b>	<b>64</b>		0.30	0.14	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Magnesium</b>	<b>18000</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Calcium</b>	<b>31000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Manganese</b>	<b>340</b>		0.59	0.086	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Nickel</b>	<b>19</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Selenium</b>	<b>0.43</b>	<b>J</b>	0.59	0.35	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
Silver	<0.30		0.30	0.077	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Vanadium</b>	<b>22</b>		0.30	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Zinc</b>	<b>69</b>		1.2	0.52	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Potassium</b>	<b>1300</b>		30	11	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1
<b>Sodium</b>	<b>1600</b>		59	8.8	mg/Kg	☼	03/08/18 17:17	03/09/18 17:28	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Barium</b>	<b>0.40</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 19:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Cadmium</b>	<b>0.0020</b>	<b>J</b>	0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 19:18	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

**Client Sample ID: 2490V2-8-B02 (0-5.5)**

**Lab Sample ID: 500-141878-7**

**Date Collected: 03/07/18 10:40**

**Matrix: Solid**

**Date Received: 03/07/18 14:45**

**Percent Solids: 77.2**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>270</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 19:18	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Cobalt</b>	<b>0.010</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Copper</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 19:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Manganese</b>	<b>5.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Potassium</b>	<b>1.1</b>	<b>J</b>	2.5	0.50	mg/L		03/13/18 06:45	03/13/18 19:18	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 19:18	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 19:18	1
<b>Zinc</b>	<b>0.17</b>	<b>J</b>	0.50	0.020	mg/L		03/13/18 06:45	03/13/18 19:18	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.93</b>	<b>F1</b>	0.025	0.010	mg/L		03/13/18 06:45	03/14/18 03:29	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:51	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:24	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.019	0.0064	mg/Kg	☼	03/09/18 15:15	03/12/18 13:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.62		0.62	0.21	mg/Kg	☼	03/15/18 10:15	03/15/18 15:45	1
<b>pH</b>	<b>7.4</b>		0.20	0.20	SU			03/13/18 15:34	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141878-3

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
Contact: Matt Weiss  
Company: Terracon  
Address: Naperville IL  
Address:  
Phone:  
Fax:  
E-Mail:

Bill To (optional)  
Contact:  
Company:  
Address:  
Address:  
Phone:  
Fax:  
PO#/Reference#

## Chain of Custody Record

Lab Job #: 500-141878  
Chain of Custody Number: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_  
Temperature °C of Cooler: 49

Client: <u>Terracon</u>		Client Project # <u>11187007B</u>		Preservative		Parameter										Preservative Key	
Project Name <u>Work Order #45</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Location/State <u>Crystal Lake, IL</u>		Lab Project #															
Sampler <u>Ryan J Peterson</u>		Lab PM															
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix											Comments
5		2490V2-8-Box(0-5.5)	3/7	1030	5	S	X	X	X	X	X	X	X				
6		2490V2-8-Box(0-5.5)DAP	3/7	1030	5	S	X	X	X	X	X	X	X				
7		2490V2-8-Box(0-5.5)	3/7	1040	5	S	X	X	X	X	X	X	X				

Turnaround Time Required (Business Days)  
 1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company <u>Terracon</u> Date <u>3/7/18</u> Time <u>1300</u>	Received By <u>[Signature]</u> Company <u>IA</u> Date <u>3/7/18</u> Time <u>1350</u>
Relinquished By <u>[Signature]</u> Company <u>IA</u> Date <u>3/7/18</u> Time <u>1445</u>	Received By <u>[Signature]</u> Company <u>TA-CORE</u> Date <u>3/7/18</u> Time <u>1445</u>

Lab Courier: TD  
Shipped: \_\_\_\_\_  
Hand Delivered: \_\_\_\_\_

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
\*NO AL  
\*Hold SPLP

Lab Comments:

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141878-3

**Login Number: 141878**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rd Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

Haligus Road (Southbound) IDOT STA 102+21.81 to 107+50 (ISGS Site 2490V2-10)

City: Crystal Lake State: IL Zip Code: 60014

County: McHenry Township: Dorr

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24793 Longitude: -88.40350  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: \_\_\_\_\_ BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

### II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: kristine.kutscher@illinois.gov

Email, if available: kristine.kutscher@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 335-IL Rt 176 at Haligus Rd and Mt Thabor Rr

Latitude: 42.24793 Longitude: -88.40350

Uncontaminated Site Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located [35 Ill. Adm. Code 1100.610(a)]:

Soil from borings B01 and B02 was sampled adjacent to ISGS Site No 2490V2-10.  
See Exhibits 4, 4A, and Table 11 of the Preliminary Site Investigation Report prepared by Terracon.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TestAmerica Lab Report No J141818-1.  
Also see Preliminary Site Investigation Report prepared by Terracon. CCDD/USFO facility in MSA County.

**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Matt Weiss (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

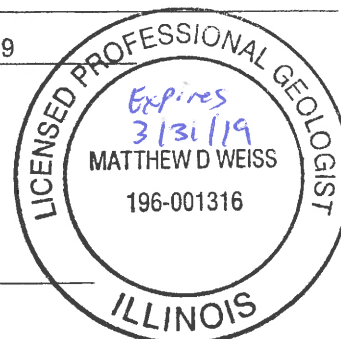
**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Company Name: Terracon Consultants, Inc  
 Street Address: 192 Exchange Blvd  
 City: Glendale Heights State: IL Zip Code: 60139  
 Phone: 630-717-4263

Matt Weiss  
 Printed Name:

[Signature]

10/12/18  
 Date:



Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:



Comparison of Detected Constituents to MACs-PTB 174-009;Work Order:045A

Preliminary Site Investigation

FAP 335- IL Rte 176- Haligus/Mt. Thabor (PESA #2490V2-10)

Crystal Lake, IL

Terracon Project No. 11187007B

Page 1 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-10-B01 (0-4)	2490V2-10-B02 (0-4)	2490V2-10-B02 DUP (0-4)	
				CCDD	Sample Depth (feet)	0-4	0-4	0-4	
		mg/kg	Chicago	MSAs	pH 6.25-9.0	Date Collected	3/6/2018	3/6/2018	3/6/2018
<b>Volatile Organic Analytical Parameters</b>									
Carbon Tetrachloride	mg/kg	---	---	0.07		<0.0017	0.0025	0.0032	
<b>Semivolatile Organic Analytical Parameters</b>									
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.018	0.011	0.0095	
Chrysene	mg/kg	1.2	2.7	88		0.018	<0.042	<0.041	
Fluoranthene	mg/kg	2.7	4.1	3100		0.026	0.016	0.012	
Phenanthrene	mg/kg	1.3	2.5	210		0.019	0.0073	<0.041	
Pyrene	mg/kg	1.9	3.0	2300		0.021	0.0094	<0.041	
<b>Inorganic Analytical Parameters</b>									
Arsenic	mg/kg	---	13	11.3		6.4	5	5	
Barium	mg/kg	---	110	1500		48	57	46	
Cadmium	mg/kg	---	0.6	5.2		0.14	0.26	0.17	
Chromium, total	mg/kg	---	16.2	21		15	15	26	
Lead	mg/kg	---	36	107		18	16	21	
Mercury	mg/kg	---	0.06	0.1		0.017	0.034	0.024	
Selenium	mg/kg	---	0.48	1.3		0.63	0.68	0.83	
Silver	mg/kg	---	0.55	4.4		<0.29	<0.32	<0.30	
Antimony	mg/kg	---	4.0	5		<1.2	<1.3	<1.2	
Beryllium	mg/kg	---	0.59	22		0.64	0.62	0.57	
Calcium	mg/kg	---	9,300	---		24000	16000	36000	
Cobalt	mg/kg	---	8.9	20		11	10	8.7	
Copper	mg/kg	---	19.6	2900		18	17	18	
Cyanide	mg/kg	---	0.51	---		<0.57	<0.59	<0.47	
Iron	mg/kg	---	15,900	15000		18000	15000	15000	
Magnesium	mg/kg	---	4,820	325000		14000	9900	23000	
Manganese	mg/kg	---	636	630		380	330	350	
Nickel	mg/kg	---	18	100		23	19	19	
Potassium	mg/kg	---	1,268	---		1700	1500	1500	
Sodium	mg/kg	---	130	---		340	1400	1300	
Thallium	mg/kg	---	0.32	2.6		<0.58	<0.64	<0.59	
Vanadium	mg/kg	---	25.2	550		23	23	22	
Zinc	mg/kg	---	95	5100		54	47	46	
pH			6.25	9		7.4	7.3	7.7	

Preliminary Site Investigation

FAP 335- IL Rte 176- Haligus/Mt. Tabor (PESA #2490V2-10)

Crystal Lake, IL

Terracon Project No. 11187007B

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2490V2-10-B01 (0-4)	2490V2-10-B02 (0-4)	2490V2-10-B02 DUP (0-4)
				CCDD	Sample Depth (feet)	0-4	0-4	0-4
		Chicago	MSAs	mg/kg	Date Collected	3/6/2018	3/6/2018	3/6/2018
				pH 6.25-9.0				
<b>Inorganic Analytical Parameters (SPLP)</b>								
Antimony,SPLP	mg/L	---	---	---		-	-	-
Arsenic,SPLP	mg/L	---	---	---		--	--	--
Barium,SPLP	mg/L	---	---	---		--	--	--
Beryllium,SPLP	mg/L	---	---	---		--	--	--
Cadmium,SPLP	mg/L	---	---	---		--	--	--
Calcium,SPLP	mg/L	---	---	---		--	--	--
Chromium,SPLP	mg/L	---	---	---		--	--	--
Cobalt,SPLP	mg/L	---	---	---		--	--	--
Copper,SPLP	mg/L	---	---	---		--	--	--
Iron,SPLP	mg/L	---	---	---		--	--	--
Lead,SPLP	mg/L	---	---	---		--	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.41	1.3	1.1
Mercury,SPLP	mg/L	---	---	---		--	--	--
Nickel,SPLP	mg/L	---	---	---		--	--	--
Potassium,SPLP	mg/L	---	---	---		--	--	--
Selenium,SPLP	mg/L	---	---	---		--	--	--
Silver,SPLP	mg/L	---	---	---		--	--	--
Sodium,SPLP	mg/L	---	---	---		--	--	--
Thallium,SPLP	mg/L	---	---	---		--	--	--
Vanadium,SPLP	mg/L	---	---	---		--	--	--
Zinc,SPLP	mg/L	---	---	---		--	--	--
Cyanide,SPLP	mg/L	---	---	---		--	--	--
<b>Inorganic Analytical Parameters (TCLP)</b>								
Arsenic,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Barium,TCLP	mg/L	---	---	---		0.32	0.32	0.32
Cadmium,TCLP	mg/L	---	---	---		<0.0050	<0.0050	<0.0050
Chromium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.050	<0.050	<0.050
Silver,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		410	330	330
Cobalt,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Copper,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.40	<0.40	<0.40
Magnesium,TCLP	mg/L	---	---	---		110	130	120
Manganese,TCLP	mg/L	---	---	---		0.27	2.9	1.9
Nickel,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Potassium,TCLP	mg/L	---	---	---		1.8	1.4	1.2
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.025	<0.025	<0.025
Zinc,TCLP	mg/L	---	---	---		<0.50	<0.50	0.027

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-141818-1

Client Project/Site: IDOT - Crystal Lake - WO45

For:

Terracon Consulting Eng & Scientists

135 Ambassador Drive

Naperville, Illinois 60540

Attn: Mr. Matthew Weiss



Authorized for release by:

3/16/2018 3:25:41 PM

Richard Wright, Senior Project Manager

(708)534-5200

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Job ID: 500-141818-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-141818-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2018 9:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.6° C, 2.9° C and 3.1° C.

#### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 422818: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-422761 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified.(LCS 500-422761/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B01 (0-4)**

**Lab Sample ID: 500-141818-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.012	J	0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.012	J	0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.018	J	0.041	0.0088	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.026	J	0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.019	J	0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.021	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	24000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		29	10	mg/Kg	1	☼	6010B	Total/NA
Sodium	340		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	410		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	110		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.8	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2490V2-10-B02 (0-4)**

**Lab Sample ID: 500-141818-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.0025		0.0020	0.00057	mg/Kg	1	☼	8260B	Total/NA
Benzo[b]fluoranthene	0.011	J	0.042	0.0091	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.016	J	0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.0073	J	0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0094	J	0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.0		0.64	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	57		0.64	0.073	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26	B	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.64	0.32	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.32	0.084	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.64	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		13	6.7	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

## Client Sample ID: 2490V2-10-B02 (0-4) (Continued)

## Lab Sample ID: 500-141818-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.32	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9900		6.4	3.2	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000	B	13	2.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.64	0.093	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.64	0.19	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.64	0.38	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.32	0.076	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.3	0.56	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		32	11	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		64	9.5	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	330		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	130		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.9		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.4	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.021	0.0069	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2490V2-10-B02 (0-4) Dup

## Lab Sample ID: 500-141818-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.0032		0.0018	0.00053	mg/Kg	1	☼	8260B	Total/NA
Benzo[b]fluoranthene	0.0095	J	0.041	0.0088	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.012	J	0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.0		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Chromium	26		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.7		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Calcium	36000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		30	11	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	330		5.0	0.50	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.2	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.027	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

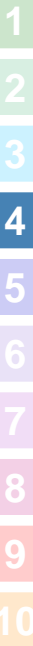
**Client Sample ID: 2490V2-10-B02 (0-4) Dup (Continued)**

**Lab Sample ID: 500-141818-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.024		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago





# Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-141818-1	2490V2-10-B01 (0-4)	Solid	03/06/18 11:20	03/07/18 09:23
500-141818-2	2490V2-10-B02 (0-4)	Solid	03/06/18 11:05	03/07/18 09:23
500-141818-3	2490V2-10-B02 (0-4) Dup	Solid	03/06/18 11:05	03/07/18 09:23

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B01 (0-4)**

**Lab Sample ID: 500-141818-1**

Date Collected: 03/06/18 11:20

Matrix: Solid

Date Received: 03/07/18 09:23

Percent Solids: 80.8

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131	03/07/18 16:00	03/09/18 15:52	1
Dibromofluoromethane	90		75 - 126	03/07/18 16:00	03/09/18 15:52	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	03/07/18 16:00	03/09/18 15:52	1
Toluene-d8 (Surr)	100		75 - 124	03/07/18 16:00	03/09/18 15:52	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Benzo[a]anthracene</b>	<b>0.012</b>	<b>J</b>	0.041	0.0055	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B01 (0-4)**

**Lab Sample ID: 500-141818-1**

**Date Collected: 03/06/18 11:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[a]pyrene</b>	<b>0.012</b>	<b>J</b>	0.041	0.0079	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Benzo[b]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.041	0.0088	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Chrysene</b>	<b>0.018</b>	<b>J</b>	0.041	0.011	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
3,3'-Dichlorobenzidine	<0.21	F1 F2	0.21	0.057	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4-Dinitrophenol	<0.82	F1 *	0.82	0.72	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4-Dinitrotoluene	<0.21	F1	0.21	0.065	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Di-n-octyl phthalate	<0.21	F1	0.21	0.067	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Fluoranthene</b>	<b>0.026</b>	<b>J</b>	0.041	0.0076	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B01 (0-4)**

**Lab Sample ID: 500-141818-1**

**Date Collected: 03/06/18 11:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.8**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.82	F1	0.82	0.39	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Phenanthrene</b>	<b>0.019</b>	<b>J</b>	0.041	0.0057	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
<b>Pyrene</b>	<b>0.021</b>	<b>J</b>	0.041	0.0081	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 16:50	03/12/18 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		44 - 121	03/08/18 16:50	03/12/18 13:18	1
2-Fluorophenol	104		46 - 133	03/08/18 16:50	03/12/18 13:18	1
Nitrobenzene-d5	93		41 - 120	03/08/18 16:50	03/12/18 13:18	1
Phenol-d5	108		46 - 125	03/08/18 16:50	03/12/18 13:18	1
Terphenyl-d14	86		35 - 160	03/08/18 16:50	03/12/18 13:18	1
2,4,6-Tribromophenol	78		25 - 139	03/08/18 16:50	03/12/18 13:18	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Arsenic</b>	<b>6.4</b>		0.58	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Barium</b>	<b>48</b>		0.58	0.067	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Beryllium</b>	<b>0.64</b>		0.23	0.055	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Cadmium</b>	<b>0.14</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Chromium</b>	<b>15</b>		0.58	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Cobalt</b>	<b>11</b>		0.29	0.076	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Copper</b>	<b>18</b>		0.58	0.16	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Iron</b>	<b>18000</b>		12	6.1	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Lead</b>	<b>18</b>		0.29	0.13	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Magnesium</b>	<b>14000</b>		5.8	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Calcium</b>	<b>24000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Manganese</b>	<b>380</b>		0.58	0.085	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Nickel</b>	<b>23</b>		0.58	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Selenium</b>	<b>0.63</b>		0.58	0.34	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
Silver	<0.29		0.29	0.075	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Vanadium</b>	<b>23</b>		0.29	0.069	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Zinc</b>	<b>54</b>		1.2	0.51	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Potassium</b>	<b>1700</b>		29	10	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1
<b>Sodium</b>	<b>340</b>		58	8.6	mg/Kg	☼	03/08/18 17:17	03/09/18 16:23	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:18	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B01 (0-4)**

**Lab Sample ID: 500-141818-1**

**Date Collected: 03/06/18 11:20**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>410</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:18	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:18	1
<b>Magnesium</b>	<b>110</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:18	1
<b>Manganese</b>	<b>0.27</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
<b>Potassium</b>	<b>1.8 J</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:18	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:18	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:18	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:18	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>0.41</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:23	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:39	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 08:58	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.017 J</b>		0.018	0.0061	mg/Kg	☼	03/09/18 15:15	03/12/18 11:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:40	1
<b>pH</b>	<b>7.4</b>		0.20	0.20	SU			03/08/18 15:10	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4)**

**Lab Sample ID: 500-141818-2**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 73.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
<b>Carbon tetrachloride</b>	<b>0.0025</b>		0.0020	0.00057	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Chloroethane	<0.0049	*	0.0049	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	03/07/18 16:00	03/09/18 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		75 - 131	03/07/18 16:00	03/09/18 16:18	1
Dibromofluoromethane	94		75 - 126	03/07/18 16:00	03/09/18 16:18	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/09/18 16:18	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/09/18 16:18	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4)**

**Lab Sample ID: 500-141818-2**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 73.8**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
<b>Benzo[b]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.042	0.0091	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4-Dinitrophenol	<0.85	*	0.85	0.75	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
<b>Fluoranthene</b>	<b>0.016</b>	<b>J</b>	0.042	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4)**

**Lab Sample ID: 500-141818-2**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 73.8**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
<b>Phenanthrene</b>	<b>0.0073</b>	<b>J</b>	0.042	0.0059	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
Phenol	<0.21		0.21	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
<b>Pyrene</b>	<b>0.0094</b>	<b>J</b>	0.042	0.0084	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	03/08/18 16:50	03/09/18 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	85		44 - 121	03/08/18 16:50	03/09/18 12:38	1
2-Fluorophenol	89		46 - 133	03/08/18 16:50	03/09/18 12:38	1
Nitrobenzene-d5	77		41 - 120	03/08/18 16:50	03/09/18 12:38	1
Phenol-d5	85		46 - 125	03/08/18 16:50	03/09/18 12:38	1
Terphenyl-d14	75		35 - 160	03/08/18 16:50	03/09/18 12:38	1
2,4,6-Tribromophenol	110		25 - 139	03/08/18 16:50	03/09/18 12:38	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.25	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Arsenic</b>	<b>5.0</b>		0.64	0.22	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Barium</b>	<b>57</b>		0.64	0.073	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Beryllium</b>	<b>0.62</b>		0.26	0.060	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Cadmium</b>	<b>0.26</b>	<b>B</b>	0.13	0.023	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Chromium</b>	<b>15</b>		0.64	0.32	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Cobalt</b>	<b>10</b>		0.32	0.084	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Copper</b>	<b>17</b>		0.64	0.18	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Iron</b>	<b>15000</b>		13	6.7	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Lead</b>	<b>16</b>		0.32	0.15	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Magnesium</b>	<b>9900</b>		6.4	3.2	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Calcium</b>	<b>16000</b>	<b>B</b>	13	2.2	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Manganese</b>	<b>330</b>		0.64	0.093	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Nickel</b>	<b>19</b>		0.64	0.19	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Selenium</b>	<b>0.68</b>		0.64	0.38	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
Silver	<0.32		0.32	0.083	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
Thallium	<0.64		0.64	0.32	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Vanadium</b>	<b>23</b>		0.32	0.076	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Zinc</b>	<b>47</b>		1.3	0.56	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Potassium</b>	<b>1500</b>		32	11	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1
<b>Sodium</b>	<b>1400</b>		64	9.5	mg/Kg	☼	03/08/18 17:17	03/09/18 16:28	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:22	1

TestAmerica Chicago



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4)**

**Lab Sample ID: 500-141818-2**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 73.8**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>330</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:22	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:22	1
<b>Magnesium</b>	<b>130</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:22	1
<b>Manganese</b>	<b>2.9</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
<b>Potassium</b>	<b>1.4 J</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:22	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:22	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:22	1
Zinc	<0.50		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:22	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:28	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:40	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:03	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.021	0.0069	mg/Kg	☼	03/09/18 15:15	03/12/18 13:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	03/08/18 15:20	03/09/18 15:40	1
<b>pH</b>	<b>7.3</b>		0.20	0.20	SU			03/08/18 15:12	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4) Dup**

**Lab Sample ID: 500-141818-3**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
<b>Carbon tetrachloride</b>	<b>0.0032</b>		0.0018	0.00053	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	03/07/18 16:00	03/09/18 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 131	03/07/18 16:00	03/09/18 16:43	1
Dibromofluoromethane	92		75 - 126	03/07/18 16:00	03/09/18 16:43	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	03/07/18 16:00	03/09/18 16:43	1
Toluene-d8 (Surr)	99		75 - 124	03/07/18 16:00	03/09/18 16:43	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4) Dup**

**Lab Sample ID: 500-141818-3**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
<b>Benzo[b]fluoranthene</b>	<b>0.0095</b>	<b>J</b>	0.041	0.0088	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
<b>Fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.041	0.0076	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4) Dup**

**Lab Sample ID: 500-141818-3**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.5**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/08/18 16:50	03/09/18 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	82		44 - 121	03/08/18 16:50	03/09/18 13:05	1
2-Fluorophenol	88		46 - 133	03/08/18 16:50	03/09/18 13:05	1
Nitrobenzene-d5	75		41 - 120	03/08/18 16:50	03/09/18 13:05	1
Phenol-d5	80		46 - 125	03/08/18 16:50	03/09/18 13:05	1
Terphenyl-d14	70		35 - 160	03/08/18 16:50	03/09/18 13:05	1
2,4,6-Tribromophenol	104		25 - 139	03/08/18 16:50	03/09/18 13:05	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Arsenic</b>	<b>5.0</b>		0.59	0.20	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Barium</b>	<b>46</b>		0.59	0.068	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Beryllium</b>	<b>0.57</b>		0.24	0.055	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Cadmium</b>	<b>0.17</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Chromium</b>	<b>26</b>		0.59	0.29	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Cobalt</b>	<b>8.7</b>		0.30	0.078	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Copper</b>	<b>18</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Iron</b>	<b>15000</b>		12	6.2	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Lead</b>	<b>21</b>		0.30	0.14	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Magnesium</b>	<b>23000</b>		5.9	2.9	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Calcium</b>	<b>36000</b>	<b>B</b>	12	2.0	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Manganese</b>	<b>350</b>		0.59	0.086	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Nickel</b>	<b>19</b>		0.59	0.17	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Selenium</b>	<b>0.83</b>		0.59	0.35	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
Silver	<0.30		0.30	0.077	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Vanadium</b>	<b>22</b>		0.30	0.070	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Zinc</b>	<b>46</b>		1.2	0.52	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1
<b>Sodium</b>	<b>1300</b>		59	8.8	mg/Kg	☼	03/08/18 17:17	03/09/18 16:32	1

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
<b>Barium</b>	<b>0.32</b>	<b>J</b>	0.50	0.050	mg/L		03/13/18 06:45	03/13/18 18:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/13/18 06:45	03/13/18 18:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/13/18 06:45	03/13/18 18:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

**Client Sample ID: 2490V2-10-B02 (0-4) Dup**

**Lab Sample ID: 500-141818-3**

**Date Collected: 03/06/18 11:05**

**Matrix: Solid**

**Date Received: 03/07/18 09:23**

**Percent Solids: 80.5**

**Method: 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>330</b>		5.0	0.50	mg/L		03/13/18 06:45	03/13/18 18:26	1
Chromium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
Cobalt	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
Copper	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
Iron	<0.40		0.40	0.20	mg/L		03/13/18 06:45	03/13/18 18:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/13/18 06:45	03/13/18 18:26	1
<b>Magnesium</b>	<b>120</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:26	1
<b>Manganese</b>	<b>1.9</b>		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
Nickel	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
<b>Potassium</b>	<b>1.2 J</b>		2.5	0.50	mg/L		03/13/18 06:45	03/13/18 18:26	1
Selenium	<0.050		0.050	0.020	mg/L		03/13/18 06:45	03/13/18 18:26	1
Silver	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
Vanadium	<0.025		0.025	0.010	mg/L		03/13/18 06:45	03/13/18 18:26	1
<b>Zinc</b>	<b>0.027 J</b>		0.50	0.020	mg/L		03/13/18 06:45	03/13/18 18:26	1

**Method: 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		03/13/18 06:45	03/14/18 02:32	1

**Method: 6020A - Metals (ICP/MS) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/13/18 06:45	03/13/18 16:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/13/18 06:45	03/13/18 16:41	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		03/13/18 12:30	03/14/18 09:04	1

**Method: 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.018	0.0059	mg/Kg	☼	03/09/18 15:15	03/12/18 13:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	03/08/18 15:20	03/09/18 15:42	1
<b>pH</b>	<b>7.7</b>		0.20	0.20	SU			03/08/18 15:14	1

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Crystal Lake - WO45

TestAmerica Job ID: 500-141818-1

## Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) \_\_\_\_\_  
 Contact: Matt Weiss  
 Company: Terracon  
 Address: \_\_\_\_\_  
 Address: Naperville  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-141818  
 Chain of Custody Number: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Temperature °C of Cooler: 26.13, 1.29

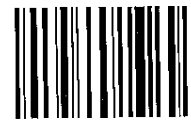
Client		Client Project #		Preservative		Parameter		Matrix		Matrix		Matrix		Matrix		Matrix		Matrix		Matrix		Matrix	
<u>Terracon</u>		<u>1118700-73</u>																					
Project Name		Work Order #45		Parameter																			
Project Location/State		Crystal Lake IL		Lab Project #																			
Sampler		Kym J Peterson		Lab PM																			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOCs	SVOCs	Total TAL	23 Inorg.	pH	TLLP TAL	23 Inorg.	SPLP TAL	23 Inorg.								
		<u>2490V2-10-801(0-4)</u>	<u>3/6</u>	<u>1120</u>	<u>5</u>	<u>S</u>	X	X	X	X	X	X	X	X	X								
<u>2</u>		<u>2490V2-10-802(0-4)</u>	<u>3/6</u>	<u>1105</u>	<u>5</u>	<u>S</u>	X	X	X	X	X	X	X	X	X								
<u>3</u>		<u>2490V2-10-802(0-4)DP</u>	<u>3/6</u>	<u>1105</u>	<u>5</u>	<u>S</u>	X	X	X	X	X	X	X	X	X								

- Preservative Key
1. HCL, Cool to 4°
  2. H2SO4, Cool to 4°
  3. HNO3, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO4
  7. Cool to 4°
  8. None
  9. Other



500-141818 COC

Elmhurst



503325

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days  10 Days \_\_\_ 15 Days \_\_\_ Other  
 Requested Due Date: \_\_\_\_\_

Sample Disposal  
 Return to Client  Dispose by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>Terracon</u> Date: <u>3/6/18</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>3/6/18</u> Time: <u>1600</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>2/27/18</u> Time: <u>830</u>	Received By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/7/18</u> Time: <u>0830</u>
Relinquished By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>3/5/18</u> Time: <u>0923</u>	Received By: <u>[Signature]</u> Company: <u>TA/HT</u> Date: <u>03/07/18</u> Time: <u>0923</u>

Lab Courier: TA  
 Shipped: \_\_\_\_\_  
 Hand Delivered: \_\_\_\_\_

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
No AL  
Hold SPLP

Lab Comments: \_\_\_\_\_



## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-141818-1

**Login Number: 141818**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6, 2.9, 3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

