



Project Name: FAU 1312-Golf Road at Harms Road  
 Latitude: 42.05542 Longitude: -87.76638

### 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 B04 were sampled adjacent to ISGS Site No 2409V-1.  
 See Exhibits 2, 2A, 2B, 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 J146450-1.  
 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: 135 Ambassador Drive

City: Naperville State: IL Zip Code: 60540

Phone: 630-717-4263

*Matt Weiss*

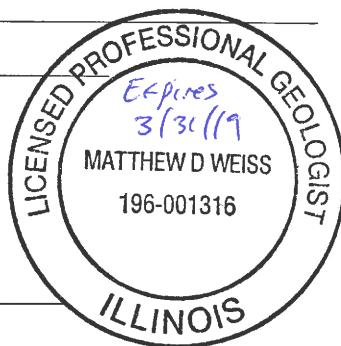
Printed Name:

*Natalie*

*8/3/18*

Date:

Licensed Professional Engineer or  
 Licensed Professional Geologist Signature:



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



# Illinois Environmental Protection Agency

Page 1 of 2

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: FAU 1312-Golf Road at Harms Road Office Phone Number, if available: \_\_\_\_\_

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

Harms Road (Southbound) IDOT STA 58+00 to 62+05.8 (ISGS Site 2409V-1)

City: Morton Grove State: IL Zip Code: 60077

County: Cook Township: Niles

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

Latitude: 42.05542 Longitude: -87.76638  
(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

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

### Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

Project Name: FAU 1312-Golf Road at Harms Road

Latitude: 42.05542 Longitude: -87.76638

### 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 B07, B08, and B09 were sampled adjacent to ISGS Site No 2409V-1.  
See Exhibits 2, 2A, 2B, 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 J146393-1.  
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: 135 Ambassador Drive

City: Naperville State: IL Zip Code: 60540

Phone: 630-717-4263

*Matt Weiss*

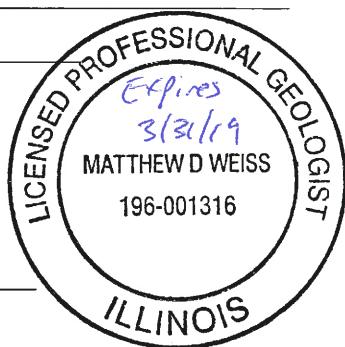
Printed Name:

*Matt*

Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Date:

*8/3/18*



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

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 1 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B01 (0-3)	2409V-1-B04 (0-3)	2409V-1-B07 (0-5)
				CCDD	Sample Depth (feet)	(0-3)	(0-3)	(0-5)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018	06/05/2018	06/04/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		<0.0073	0.0087	0.012
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.0072	<0.0072	<0.0070
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0053	<0.0053	<0.0051
Anthracene	mg/kg	0.25	0.4	12000		<0.0067	<0.0067	<0.0065
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.036	<0.0054	<0.0052
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.045	<0.0077	<0.0075
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.06	<0.0086	<0.0084
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.025	<0.013	<0.013
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.018	<0.012	<0.011
Chrysene	mg/kg	1.2	2.7	88		0.049	<0.011	<0.011
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0077	<0.0077	<0.0075
Fluoranthene	mg/kg	2.7	4.1	3100		0.07	<0.0074	<0.0072
Fluorene	mg/kg	0.1	0.18	560		<0.0056	<0.0056	<0.0055
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.022	<0.010	<0.010
Phenanthrene	mg/kg	1.3	2.5	210		0.03	<0.0056	<0.0054
Pyrene	mg/kg	1.9	3.0	2300		0.065	<0.0079	<0.0077
Carbazole	mg/kg	---	---	0.6		0.12	<0.10	<0.097
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.2	5.1	4
Barium	mg/kg	---	110	1500		56	70	52
Cadmium	mg/kg	---	0.6	5.2		0.36	0.21	0.14
Chromium, total	mg/kg	---	16.2	21		17	20	15
Lead	mg/kg	---	36	107		47	16	12
Mercury	mg/kg	---	0.06	0.89		0.083	0.032	0.026
Selenium	mg/kg	---	0.48	1.3		0.68	1.1	0.97
Silver	mg/kg	---	0.55	4.4		0.24	0.32	0.23
Antimony	mg/kg	---	4.0	5		<0.22	<0.23	<0.22
Beryllium	mg/kg	---	0.59	22		0.65	0.79	0.64
Calcium	mg/kg	---	9,300	---		3900	2600	3600
Cobalt	mg/kg	---	8.9	20		9	12	7.1
Copper	mg/kg	---	19.6	2900		23	17	17
Cyanide	mg/kg	---	0.51	---		<0.19	<0.20	<0.18
Iron	mg/kg	---	15,900	15000		16000	20000	18000
Magnesium	mg/kg	---	4,820	325000		4400	4400	4200
Manganese	mg/kg	---	636	630		300	410	190
Nickel	mg/kg	---	18	100		25	27	21
Potassium	mg/kg	---	1,268	---		1700	2000	910
Sodium	mg/kg	---	130	---		390	550	410
Thallium	mg/kg	---	0.32	2.6		<0.28	<0.29	<0.28
Vanadium	mg/kg	---	25.2	550		25	31	21
Zinc	mg/kg	---	95	5100		64	60	54
pH			6.25	9		7.6	8	8.3

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 2 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B01 (0-3)	2409V-1-B04 (0-3)	2409V-1-B07 (0-5)
				CCDD	Sample Depth (feet)	(0-3)	(0-3)	(0-5)
		Chicago	MSAs	pH 6.25-9.0	Date Collected	06/05/2018	06/05/2018	06/04/2018
<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	---	---	---		0.32	--	--
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		0.78	--	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	---	---	---		<0.010	<0.010	<0.010
Barium,TCLP	mg/L	---	---	---		0.27	0.14	0.21
Cadmium,TCLP	mg/L	---	---	---		0.0046	0.002	0.002
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Lead,TCLP	mg/L	---	---	---		0.016	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		110	49	100
Cobalt,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Copper,TCLP	mg/L	---	---	---		0.014	<0.010	<0.010
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.38	0.59	0.23
Magnesium,TCLP	mg/L	---	---	---		46	14	43
Manganese,TCLP	mg/L	---	---	---		0.3	0.014	0.21
Nickel,TCLP	mg/L	---	---	---		0.015	<0.010	0.02
Potassium,TCLP	mg/L	---	---	---		1.3	0.67	0.71
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Zinc,TCLP	mg/L	---	---	---		0.073	<0.020	<0.020

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 3 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B07 (5-10)	2409V-1-B07 (10-13)	2409V-1-B08 (0-5)
				CCDD	Sample Depth (feet)	(5-10)	(10-13)	(0-5)
		Chicago	MSAs	mg/kg	Date Collected	06/04/2018	06/04/2018	06/04/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		0.011	0.021	<0.0073
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.0067	<0.0066	<0.0070
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0049	<0.0048	<0.0051
Anthracene	mg/kg	0.25	0.4	12000		<0.0062	<0.0061	<0.0065
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.0050	<0.0049	0.018
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.0072	<0.0071	0.018
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.0080	<0.0079	<0.0084
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.012	<0.012	0.013
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.011	<0.011	<0.012
Chrysene	mg/kg	1.2	2.7	88		<0.010	<0.010	0.019
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0072	<0.0071	<0.0075
Fluoranthene	mg/kg	2.7	4.1	3100		<0.0069	<0.0068	0.027
Fluorene	mg/kg	0.1	0.18	560		<0.0052	<0.0052	<0.0055
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.0096	<0.0095	0.011
Phenanthrene	mg/kg	1.3	2.5	210		0.019	0.037	0.012
Pyrene	mg/kg	1.9	3.0	2300		<0.0074	0.01	0.029
Carbazole	mg/kg	---	---	0.6		<0.093	<0.092	<0.098
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		5.7	6.1	6.6
Barium	mg/kg	---	110	1500		32	26	52
Cadmium	mg/kg	---	0.6	5.2		0.19	0.19	0.22
Chromium, total	mg/kg	---	16.2	21		13	11	14
Lead	mg/kg	---	36	107		11	10	28
Mercury	mg/kg	---	0.06	0.89		0.016	0.018	0.036
Selenium	mg/kg	---	0.48	1.3		0.91	1.1	1.1
Silver	mg/kg	---	0.55	4.4		0.18	0.18	0.25
Antimony	mg/kg	---	4.0	5		<0.21	<0.21	<0.22
Beryllium	mg/kg	---	0.59	22		0.61	0.57	0.63
Calcium	mg/kg	---	9,300	---		82000	110000	3700
Cobalt	mg/kg	---	8.9	20		10	9.7	7.4
Copper	mg/kg	---	19.6	2900		24	24	16
Cyanide	mg/kg	---	0.51	---		<0.16	<0.18	<0.18
Iron	mg/kg	---	15,900	15000		16000	15000	15000
Magnesium	mg/kg	---	4,820	325000		28000	41000	3400
Manganese	mg/kg	---	636	630		380	430	220
Nickel	mg/kg	---	18	100		27	24	20
Potassium	mg/kg	---	1,268	---		2200	1900	1000
Sodium	mg/kg	---	130	---		140	210	100
Thallium	mg/kg	---	0.32	2.6		<0.26	<0.26	<0.28
Vanadium	mg/kg	---	25.2	550		15	13	20
Zinc	mg/kg	---	95	5100		46	41	57
pH			6.25	9		7.8	8	7.8

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 4 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B07 (5-10)	2409V-1-B07 (10-13)	2409V-1-B08 (0-5)	
				CCDD	Sample Depth (feet)	(5-10)	(10-13)	(0-5)	
				mg/kg	Date Collected	06/04/2018	06/04/2018	06/04/2018	
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	---	---	---		0.049	0.043	--	
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	---	---	---		<0.010	<0.010	<0.010	
Barium,TCLP	mg/L	---	---	---		0.58	0.54	0.18	
Cadmium,TCLP	mg/L	---	---	---		<0.0020	0.0021	<0.0020	
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010	
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075	
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020	
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020	
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010	
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060	
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040	
Calcium,TCLP	mg/L	---	---	---		570	540	74	
Cobalt,TCLP	mg/L	---	---	---		0.026	0.03	<0.010	
Copper,TCLP	mg/L	---	---	---		0.014	0.015	<0.010	
Cyanide,TCLP	mg/L	---	---	---		--	--	--	
Iron,TCLP	mg/L	---	---	---		<0.20	<0.20	0.52	
Magnesium,TCLP	mg/L	---	---	---		45	55	22	
Manganese,TCLP	mg/L	---	---	---		2.6	2.3	0.061	
Nickel,TCLP	mg/L	---	---	---		0.054	0.073	0.018	
Potassium,TCLP	mg/L	---	---	---		4.8	4.8	1.3	
Sodium,TCLP	mg/L	---	---	---		--	--	--	
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020	
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010	
Zinc,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020	

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 5 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B08 (0-5) Dup	2409V-1-B08 (5-8)	2409V-1-B09 (0-5)
				CCDD	Sample Depth (feet)	(0-5)	(5-8)	(0-5)
		Chicago	MSAs	pH 6.25-9.0	Date Collected	06/04/2018	06/04/2018	06/04/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		<0.0074	0.013	<0.0071
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.0072	<0.0064	0.016
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0053	<0.0047	0.012
Anthracene	mg/kg	0.25	0.4	12000		<0.0067	<0.0060	0.061
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.028	<0.0048	0.27
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.035	<0.0069	0.29
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.041	<0.0077	0.41
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.018	<0.012	0.11
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.012	<0.011	0.13
Chrysene	mg/kg	1.2	2.7	88		0.033	0.018	0.3
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0078	<0.0069	0.035
Fluoranthene	mg/kg	2.7	4.1	3100		0.048	<0.0066	0.55
Fluorene	mg/kg	0.1	0.18	560		<0.0056	<0.0050	0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.017	<0.0093	0.1
Phenanthrene	mg/kg	1.3	2.5	210		0.021	0.03	0.25
Pyrene	mg/kg	1.9	3.0	2300		0.049	<0.0071	0.45
Carbazole	mg/kg	---	---	0.6		0.12	<0.090	0.14
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		6.9	6.8	2.8
Barium	mg/kg	---	110	1500		74	31	33
Cadmium	mg/kg	---	0.6	5.2		0.28	0.19	0.34
Chromium, total	mg/kg	---	16.2	21		16	12	10
Lead	mg/kg	---	36	107		25	21	98
Mercury	mg/kg	---	0.06	0.89		0.041	0.018	0.021
Selenium	mg/kg	---	0.48	1.3		1.3	0.71	0.43
Silver	mg/kg	---	0.55	4.4		0.29	0.18	0.12
Antimony	mg/kg	---	4.0	5		<0.22	<0.22	0.32
Beryllium	mg/kg	---	0.59	22		0.72	0.58	0.42
Calcium	mg/kg	---	9,300	---		3800	80000	110000
Cobalt	mg/kg	---	8.9	20		12	11	3.7
Copper	mg/kg	---	19.6	2900		18	23	15
Cyanide	mg/kg	---	0.51	---		<0.18	<0.16	<0.19
Iron	mg/kg	---	15,900	15000		18000	16000	8500
Magnesium	mg/kg	---	4,820	325000		4100	29000	45000
Manganese	mg/kg	---	636	630		530	390	230
Nickel	mg/kg	---	18	100		29	27	9.5
Potassium	mg/kg	---	1,268	---		1200	2000	790
Sodium	mg/kg	---	130	---		110	150	690
Thallium	mg/kg	---	0.32	2.6		<0.28	<0.28	<0.26
Vanadium	mg/kg	---	25.2	550		23	14	14
Zinc	mg/kg	---	95	5100		66	40	57
pH			6.25	9		7.5	7.9	8.9

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 6 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B08 (0-5) Dup	2409V-1-B08 (5-8)	2409V-1-B09 (0-5)
				CCDD	Sample Depth (feet)	(0-5)	(5-8)	(0-5)
		Chicago	MSAs	pH 6.25-9.0	Date Collected	06/04/2018	06/04/2018	06/04/2018
<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	---	---	---		--	--	0.23
Magnesium,SPLP	mg/L	---	---	---		--	--	--
Manganese,SPLP	mg/L	---	---	---		--	0.066	0.39
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	---	---	---		<0.010	<0.010	<0.010
Barium,TCLP	mg/L	---	---	---		0.19	0.56	0.37
Cadmium,TCLP	mg/L	---	---	---		0.002	0.0022	0.0047
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	0.011
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		78	540	410
Cobalt,TCLP	mg/L	---	---	---		<0.010	0.034	<0.010
Copper,TCLP	mg/L	---	---	---		<0.010	0.014	<0.010
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.63	<0.20	<0.20
Magnesium,TCLP	mg/L	---	---	---		24	42	120
Manganese,TCLP	mg/L	---	---	---		0.067	3.3	0.9
Nickel,TCLP	mg/L	---	---	---		0.033	0.062	0.039
Potassium,TCLP	mg/L	---	---	---		1.4	4.6	2.4
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Zinc,TCLP	mg/L	---	---	---		<0.020	<0.020	0.072

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 7 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B09 (5-8)
				CCDD	Sample Depth (feet)	(5-8)
		Chicago	MSAs	mg/kg	Date Collected	06/04/2018
<b>Volatile Organic Analytical Parameters</b>						
Acetone	mg/kg	---	---	25		0.022
<b>Semivolatile Organic Analytical Parameters</b>						
Acenaphthene	mg/kg	0.09	0.13	570		<0.0066
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0048
Anthracene	mg/kg	0.25	0.4	12000		<0.0061
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.0049
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.0071
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.0079
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.012
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.011
Chrysene	mg/kg	1.2	2.7	88		0.01
Dibenzo(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0071
Fluoranthene	mg/kg	2.7	4.1	3100		<0.0068
Fluorene	mg/kg	0.1	0.18	560		<0.0051
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.0095
Phenanthrene	mg/kg	1.3	2.5	210		<0.0051
Pyrene	mg/kg	1.9	3.0	2300		0.013
Carbazole	mg/kg	---	---	0.6		<0.091
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		5.1
Barium	mg/kg	---	110	1500		27
Cadmium	mg/kg	---	0.6	5.2		0.23
Chromium, total	mg/kg	---	16.2	21		14
Lead	mg/kg	---	36	107		14
Mercury	mg/kg	---	0.06	0.89		0.017
Selenium	mg/kg	---	0.48	1.3		0.88
Silver	mg/kg	---	0.55	4.4		0.19
Antimony	mg/kg	---	4.0	5		<0.22
Beryllium	mg/kg	---	0.59	22		0.66
Calcium	mg/kg	---	9,300	---		80000
Cobalt	mg/kg	---	8.9	20		9.5
Copper	mg/kg	---	19.6	2900		25
Cyanide	mg/kg	---	0.51	---		<0.18
Iron	mg/kg	---	15,900	15000		17000
Magnesium	mg/kg	---	4,820	325000		31000
Manganese	mg/kg	---	636	630		350
Nickel	mg/kg	---	18	100		30
Potassium	mg/kg	---	1,268	---		2200
Sodium	mg/kg	---	130	---		270
Thallium	mg/kg	---	0.32	2.6		0.38
Vanadium	mg/kg	---	25.2	550		16
Zinc	mg/kg	---	95	5100		56
pH			6.25	9		8.4

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-1)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 8 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-1-B09 (5-8)
				CCDD	Sample Depth (feet)	(5-8)
		Chicago	MSAs	mg/kg	Date Collected	06/04/2018
<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	---	---	---		0.2
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	---	---	---		<0.010
Barium,TCLP	mg/L	---	---	---		0.42
Cadmium,TCLP	mg/L	---	---	---		0.0044
Chromium,TCLP	mg/L	---	---	---		<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020
Silver,TCLP	mg/L	---	---	---		<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		490
Cobalt,TCLP	mg/L	---	---	---		0.016
Copper,TCLP	mg/L	---	---	---		<0.010
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.20
Magnesium,TCLP	mg/L	---	---	---		120
Manganese,TCLP	mg/L	---	---	---		2.6
Nickel,TCLP	mg/L	---	---	---		0.023
Potassium,TCLP	mg/L	---	---	---		2.7
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010
Zinc,TCLP	mg/L	---	---	---		<0.020

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

# 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: 500-146450-1

Client Project/Site: IDOT - Morton Grove - WO 049

For:

Terracon Consulting Eng & Scientists

192 Exchange Blvd

Glendale Heights, Illinois 60139

Attn: Mr. Matthew Weiss

*Jodie Bracken*

Authorized for release by:

6/21/2018 5:21:01 PM

Jodie Bracken, Project Management Assistant II

[jodie.bracken@testamericainc.com](mailto:jodie.bracken@testamericainc.com)

Designee for

Richard Wright, Senior Project Manager

(708)534-5200

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

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	4
Sample Summary .....	9
Client Sample Results .....	10
Definitions .....	30
Certification Summary .....	31
Chain of Custody .....	32
Receipt Checklists .....	33

# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Job ID: 500-146450-1

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-146450-1

### Receipt

The samples were received on 6/5/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3° C, 5.1° C, 5.4° C and 5.6° C.

### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS/LCSD associated with 437354: Bromomethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 437354 recovered outside control limits for the following analytes: Chloroethane.

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 laboratory control sample (LCS) for preparation batch 500-436422 and analytical batch 500-436747 recovered outside control limits for 3,3'-Dichlorobenzidine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.016	J	0.039	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.098	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.016	J	0.039	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0096	J	0.039	0.0055	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.023	J	0.039	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.27	J	1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	4.6		0.55	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	49		0.55	0.063	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.48		0.22	0.052	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.37	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		0.55	0.27	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	6.3		0.28	0.072	mg/Kg	1	⊗	6010B	Total/NA
Copper	44		0.55	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	12000	B	11	5.7	mg/Kg	1	⊗	6010B	Total/NA
Lead	230		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	21000	B	5.5	2.7	mg/Kg	1	⊗	6010B	Total/NA
Calcium	50000	B	110	19	mg/Kg	10	⊗	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1	⊗	6010B	Total/NA
Nickel	17		0.55	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.73		0.55	0.32	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.18	J	0.28	0.071	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	20		0.28	0.065	mg/Kg	1	⊗	6010B	Total/NA
Zinc	72		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1200		28	9.8	mg/Kg	1	⊗	6010B	Total/NA
Sodium	600		55	8.2	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0035	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	320		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.036		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	97		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.58	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.15	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.33		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025	B	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: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0087	J	0.016	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Arsenic	5.1		0.58	0.20	mg/Kg	1	⊗	6010B	Total/NA
Barium	70		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B04 (0-3) (Continued)

## Lab Sample ID: 500-146450-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.79		0.23	0.054	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.21	B	0.12	0.021	mg/Kg	1	⊗	6010B	Total/NA
Chromium	20		0.58	0.29	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	12		0.29	0.076	mg/Kg	1	⊗	6010B	Total/NA
Copper	17		0.58	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	⊗	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	4400	B	5.8	2.9	mg/Kg	1	⊗	6010B	Total/NA
Calcium	2600	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	410		0.58	0.084	mg/Kg	1	⊗	6010B	Total/NA
Nickel	27		0.58	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		0.58	0.34	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.32		0.29	0.075	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	31		0.29	0.069	mg/Kg	1	⊗	6010B	Total/NA
Zinc	60		1.2	0.51	mg/Kg	1	⊗	6010B	Total/NA
Potassium	2000		29	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	550		58	8.6	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	49		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.59		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	14		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.67	J	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.032	B	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: 2409V-1-B03 (0-3)

## Lab Sample ID: 500-146450-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014	J	0.017	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Anthracene	0.014	J	0.037	0.0063	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]anthracene	0.098		0.037	0.0051	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.19	0.094	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.13		0.037	0.010	mg/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	0.021	J	0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.21		0.037	0.0070	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	1	⊗	8270D	Total/NA
2-Methylnaphthalene	0.0082	J	0.076	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.071		0.037	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.18		0.037	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.31	J	1.1	0.22	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.7		0.57	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	62		0.57	0.065	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.61		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.51	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3) (Continued)**

**Lab Sample ID: 500-146450-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	19		0.57	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.1		0.28	0.075	mg/Kg	1	⊗	6010B	Total/NA
Copper	31		0.57	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	200		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	10000	B	5.7	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	370		0.57	0.083	mg/Kg	1	⊗	6010B	Total/NA
Nickel	21		0.57	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0		0.57	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.28		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	23		0.28	0.067	mg/Kg	1	⊗	6010B	Total/NA
Zinc	100		1.1	0.50	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1600		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	460		57	8.4	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J		0.0050	mg/L	1		6010B	TCLP
Calcium	200		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.034			0.0075	mg/L	1		6010B	TCLP
Magnesium	90		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.91		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.086	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.18			0.0075	mg/L	1		6010B	SPLP East
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.086	B		0.018	0.0061 mg/Kg	1	⊗	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0093	J	0.016	0.0071	mg/Kg	1	⊗	8260B	Total/NA
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.017	J	0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.021	J	0.040	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.010	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0078	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.019	J	0.040	0.0080	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.38	J	1.2	0.23	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.2		0.60	0.21	mg/Kg	1	⊗	6010B	Total/NA
Barium	81		0.60	0.069	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.53		0.24	0.056	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.12	0.022	mg/Kg	1	⊗	6010B	Total/NA
Chromium	13		0.60	0.30	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	16		0.30	0.079	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B02 (0-3) (Continued)

## Lab Sample ID: 500-146450-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	22		0.60	0.17	mg/Kg	1	⊗	6010B	Total/NA
Iron	18000	B	12	6.3	mg/Kg	1	⊗	6010B	Total/NA
Lead	30		0.30	0.14	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	19000	B	6.0	3.0	mg/Kg	1	⊗	6010B	Total/NA
Calcium	30000	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	870		0.60	0.087	mg/Kg	1	⊗	6010B	Total/NA
Nickel	30		0.60	0.18	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.79		0.60	0.35	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.27	J	0.30	0.078	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	26		0.30	0.071	mg/Kg	1	⊗	6010B	Total/NA
Zinc	46		1.2	0.53	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1500		30	11	mg/Kg	1	⊗	6010B	Total/NA
Sodium	250		60	8.9	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0039	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	270		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.015		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	140		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Lead	0.17		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031	B	0.020	0.0066	mg/Kg	1	⊗	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2409V-1-B01 (0-3)

## Lab Sample ID: 500-146450-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.036	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.045		0.040	0.0077	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.040	0.012	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.10	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.049		0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.070		0.040	0.0074	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.022	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.030	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.065		0.040	0.0079	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	5.2		0.56	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	56		0.56	0.064	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	17		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.0		0.28	0.074	mg/Kg	1	⊗	6010B	Total/NA
Copper	23		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	47		0.28	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3) (Continued)**

**Lab Sample ID: 500-146450-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4400	B	5.6	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3900	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	300		0.56	0.082	mg/Kg	1	⊗	6010B	Total/NA
Nickel	25		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.68		0.56	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.24	J	0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	25		0.28	0.066	mg/Kg	1	⊗	6010B	Total/NA
Zinc	64		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1700		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	390		56	8.3	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0046	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	110		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.38	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	46		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.30		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.073	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.32		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.78		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.083	B	0.018	0.0060	mg/Kg	1	⊗	7471B	Total/NA
pH	7.6		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146450-1	2409V-1-B05 (0-3)	Solid	06/05/18 07:40	06/05/18 18:30
500-146450-2	2409V-1-B04 (0-3)	Solid	06/05/18 08:10	06/05/18 18:30
500-146450-3	2409V-1-B03 (0-3)	Solid	06/05/18 08:35	06/05/18 18:30
500-146450-4	2409V-1-B02 (0-3)	Solid	06/05/18 08:55	06/05/18 18:30
500-146450-5	2409V-1-B01 (0-3)	Solid	06/05/18 09:15	06/05/18 18:30

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

Date Collected: 06/05/18 07:40

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-1**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0074		0.017	0.0074	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Carbon disulfide	<0.00088		0.0042	0.00088	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Carbon tetrachloride	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chlorobenzene	<0.00063		0.0017	0.00063	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloroethane	<0.0013 *		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloroform	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
cis-1,3-Dichloropropene	<0.00051		0.0017	0.00051	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethane	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethene	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloropropane	<0.00044		0.0017	0.00044	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Ethylbenzene	<0.00081		0.0017	0.00081	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Methylene Chloride	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
4-Methyl-2-pentanone (MIBK)	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Methyl tert-butyl ether	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Styrene	<0.00051		0.0017	0.00051	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,2,2-Tetrachloroethane	<0.00054		0.0017	0.00054	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Tetrachloroethene	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Toluene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
trans-1,2-Dichloroethene	<0.00075		0.0017	0.00075	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,1-Trichloroethane	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,2-Trichloroethane	<0.00073		0.0017	0.00073	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Trichloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Vinyl chloride	<0.00075		0.0017	0.00075	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Xylenes, Total	<0.00054		0.0034	0.00054	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		75 - 131	06/06/18 09:41	06/18/18 22:56	1
Dibromofluoromethane	111		75 - 126	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	06/06/18 09:41	06/18/18 22:56	1
Toluene-d8 (Surr)	116		75 - 124	06/06/18 09:41	06/18/18 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0070		0.039	0.0070	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Acenaphthylene	<0.0052		0.039	0.0052	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Anthracene	<0.0065		0.039	0.0065	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Benzo[a]anthracene	0.016 J		0.039	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[k]fluoranthene	<0.012		0.039	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethoxy)methane	<0.040		0.20	0.040	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethyl)ether	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-ethylhexyl) phthalate	<0.071		0.20	0.071	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Bromophenyl phenyl ether	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Butyl benzyl phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Carbazole</b>	<b>0.12</b>	<b>J</b>	0.20	0.098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloroaniline	<0.18		0.79	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloro-3-methylphenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chloronaphthalene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chlorophenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chlorophenyl phenyl ether	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.039	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenz(a,h)anthracene	<0.0076		0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenzofuran	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2-Dichlorobenzene	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,3-Dichlorobenzene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,4-Dichlorobenzene	<0.050		0.20	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3,3'-Dichlorobenzidine	<0.055	*	0.20	0.055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dichlorophenol	<0.093		0.39	0.093	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Diethyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dimethylphenol	<0.15		0.39	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dimethyl phthalate	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-butyl phthalate	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4,6-Dinitro-2-methylphenol	<0.31		0.79	0.31	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrophenol	<0.69		0.79	0.69	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrotoluene	<0.062		0.20	0.062	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,6-Dinitrotoluene	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-octyl phthalate	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Fluoranthene</b>	<b>0.024</b>	<b>J</b>	0.039	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Fluorene	<0.0055		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobenzene	<0.0091		0.079	0.0091	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobutadiene	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorocyclopentadiene	<0.22		0.79	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachloroethane	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Indeno[1,2,3-cd]pyrene	<0.010		0.039	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Isophorone	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylnaphthalene	<0.0072		0.079	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylphenol	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3 & 4 Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Naphthalene	<0.0060		0.039	0.0060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitroaniline	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3-Nitroaniline	<0.12		0.39	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Nitroaniline	<0.16		0.39	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene	<0.0098		0.039	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitrophenol	<0.092		0.39	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.37		0.79	0.37	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodi-n-propylamine	<0.048		0.079	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodiphenylamine	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,2'-oxybis[1-chloropropane]	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Pentachlorophenol	<0.63		0.79	0.63	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Phenanthrene</b>	<b>0.0096 J</b>		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Phenol	<0.087		0.20	0.087	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Pyrene</b>	<b>0.023 J</b>		0.039	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2,4-Trichlorobenzene	<0.042		0.20	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,5-Trichlorophenol	<0.089		0.39	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,6-Trichlorophenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	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			06/12/18 07:02	06/13/18 19:01	1
2-Fluorophenol	118			46 - 133			06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene-d5	90			41 - 120			06/12/18 07:02	06/13/18 19:01	1
Phenol-d5	102			46 - 125			06/12/18 07:02	06/13/18 19:01	1
Terphenyl-d14	109			35 - 160			06/12/18 07:02	06/13/18 19:01	1
2,4,6-Tribromophenol	75			25 - 139			06/12/18 07:02	06/13/18 19:01	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.27 J</b>		1.1	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Arsenic</b>	<b>4.6</b>		0.55	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Barium</b>	<b>49</b>		0.55	0.063	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Beryllium</b>	<b>0.48</b>		0.22	0.052	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cadmium</b>	<b>0.37 B</b>		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Chromium</b>	<b>14</b>		0.55	0.27	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cobalt</b>	<b>6.3</b>		0.28	0.072	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Copper</b>	<b>44</b>		0.55	0.15	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Iron</b>	<b>12000 B</b>		11	5.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Lead</b>	<b>230</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Magnesium</b>	<b>21000 B</b>		5.5	2.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Calcium</b>	<b>50000 B</b>		110	19	mg/Kg	⊗	06/07/18 08:45	06/09/18 04:50	10
<b>Manganese</b>	<b>340</b>		0.55	0.080	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Nickel</b>	<b>17</b>		0.55	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Selenium</b>	<b>0.73</b>		0.55	0.32	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Silver</b>	<b>0.18 J</b>		0.28	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
Thallium	<0.28		0.55	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Vanadium</b>	<b>20</b>		0.28	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Zinc</b>	<b>72</b>		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Potassium</b>	<b>1200</b>		28	9.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Sodium</b>	<b>600</b>		55	8.2	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Barium</b>	<b>0.30 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Cadmium</b>	<b>0.0035 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	320		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Copper	0.013 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:13	1
Lead	0.036		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:13	1
Magnesium	97		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Manganese	0.74		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Nickel	0.018 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Potassium	0.58 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Zinc	0.15 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.33		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:15	1
Manganese	0.64		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:15	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		06/12/18 16:35	06/13/18 13:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:53	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		06/12/18 14:05	06/14/18 07:28	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	B	0.018	0.0059	mg/Kg	✉	06/08/18 16:15	06/12/18 17:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.54	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.2		0.20	0.20	SU			06/12/18 14:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0087	J	0.016	0.0072	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Bromomethane	<0.0016 *		0.0041	0.0016	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Carbon disulfide	<0.00086		0.0041	0.00086	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Carbon tetrachloride	<0.00048		0.0016	0.00048	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Chlorobenzene	<0.00061		0.0016	0.00061	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Chloroethane	<0.0012 *		0.0041	0.0012	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Chloromethane	<0.0017		0.0041	0.0017	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
cis-1,3-Dichloropropene	<0.00050		0.0016	0.00050	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Dibromochloromethane	<0.00054		0.0016	0.00054	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethene	<0.00057		0.0016	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloropropane	<0.00043		0.0016	0.00043	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,3-Dichloropropene, Total	<0.00058		0.0016	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Ethylbenzene	<0.00079		0.0016	0.00079	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Styrene	<0.00050		0.0016	0.00050	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0016	0.00053	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Tetrachloroethene	<0.00056		0.0016	0.00056	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Toluene	<0.00042		0.0016	0.00042	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
trans-1,2-Dichloroethene	<0.00073		0.0016	0.00073	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
trans-1,3-Dichloropropene	<0.00058		0.0016	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
1,1,2-Trichloroethane	<0.00071		0.0016	0.00071	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Trichloroethene	<0.00056		0.0016	0.00056	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Vinyl chloride	<0.00073		0.0016	0.00073	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	☀	06/06/18 09:41	06/18/18 23:25	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	06/06/18 09:41	06/18/18 23:25	1
Dibromofluoromethane	106		75 - 126	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	06/06/18 09:41	06/18/18 23:25	1
Toluene-d8 (Surr)	110		75 - 124	06/06/18 09:41	06/18/18 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	☀	06/12/18 07:02	06/13/18 20:24	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 20:24	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	☀	06/12/18 07:02	06/13/18 20:24	1
Benzo[a]anthracene	<0.0054		0.040	0.0054	mg/Kg	☀	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[b]fluoranthene	<0.0086		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[g,h,i]perylene	<0.013		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Chrysene	<0.011		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrophenol	<0.70		0.81	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluoranthene	<0.0074		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Indeno[1,2,3-cd]pyrene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylnaphthalene	<0.0073		0.081	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pentachlorophenol	<0.64		0.81	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenanthrene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pyrene	<0.0079		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	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			06/12/18 07:02	06/13/18 20:24	1
2-Fluorophenol		123		46 - 133			06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene-d5		93		41 - 120			06/12/18 07:02	06/13/18 20:24	1
Phenol-d5		112		46 - 125			06/12/18 07:02	06/13/18 20:24	1
Terphenyl-d14		108		35 - 160			06/12/18 07:02	06/13/18 20:24	1
2,4,6-Tribromophenol		78		25 - 139			06/12/18 07:02	06/13/18 20:24	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.23		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Arsenic	5.1		0.58	0.20	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Barium	70		0.58	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Beryllium	0.79		0.23	0.054	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Chromium	20		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cobalt	12		0.29	0.076	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Copper	17		0.58	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Iron	20000	B	12	6.1	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Lead	16		0.29	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Magnesium	4400	B	5.8	2.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Calcium	2600	B	12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Manganese	410		0.58	0.084	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Nickel	27		0.58	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Selenium	1.1		0.58	0.34	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Silver	0.32		0.29	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Thallium	<0.29		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Vanadium	31		0.29	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Zinc	60		1.2	0.51	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Potassium	2000		29	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Sodium	550		58	8.6	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Barium	0.14	J	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Copper	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Iron	0.59		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:17	1
Magnesium	14		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Manganese	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Nickel	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Potassium	0.67 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	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		06/12/18 16:35	06/13/18 13:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:54	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		06/12/18 14:05	06/14/18 07:29	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:03	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.58	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.0		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

Date Collected: 06/05/18 08:35

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-3**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	J	0.017	0.0072	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Benzene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Butanone (MEK)	<0.0018		0.0042	0.0018	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chlorobenzene	<0.00061		0.0017	0.00061	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Dibromochloromethane	<0.00054		0.0017	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,3-Dichloropropene, Total	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,3-Dichloropropene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2-Trichloroethane	<0.00071		0.0017	0.00071	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl acetate	<0.0014		0.0042	0.0014	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		75 - 131	06/06/18 09:41	06/18/18 23:53	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	06/06/18 09:41	06/18/18 23:53	1
Toluene-d8 (Surr)	111		75 - 124	06/06/18 09:41	06/18/18 23:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0068		0.037	0.0068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Acenaphthylene	<0.0050		0.037	0.0050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Anthracene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Benzo[a]anthracene</b>	<b>0.098</b>		0.037	0.0051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethoxy)methane	<0.038		0.19	0.038	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethyl)ether	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-ethylhexyl) phthalate	<0.069		0.19	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Bromophenyl phenyl ether	<0.050		0.19	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Butyl benzyl phthalate	<0.072		0.19	0.072	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Carbazole	0.12 J		0.19	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloroaniline	<0.18		0.76	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloro-3-methylphenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chloronaphthalene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chlorophenol	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chlorophenyl phenyl ether	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Chrysene	0.13		0.037	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenz(a,h)anthracene	0.021 J		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenzofuran	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2-Dichlorobenzene	<0.045		0.19	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,3-Dichlorobenzene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,4-Dichlorobenzene	<0.048		0.19	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3,3'-Dichlorobenzidine	<0.053 *		0.19	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dichlorophenol	<0.090		0.37	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Diethyl phthalate	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dimethylphenol	<0.14		0.37	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dimethyl phthalate	<0.049		0.19	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-butyl phthalate	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4,6-Dinitro-2-methylphenol	<0.30		0.76	0.30	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrophenol	<0.66		0.76	0.66	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrotoluene	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,6-Dinitrotoluene	<0.074		0.19	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-octyl phthalate	<0.061		0.19	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluoranthene	0.21		0.037	0.0070	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluorene	<0.0053		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobenzene	<0.0087		0.076	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobutadiene	<0.059		0.19	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorocyclopentadiene	<0.22		0.76	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachloroethane	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Isophorone	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylnaphthalene	0.0082 J		0.076	0.0069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylphenol	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3 & 4 Methylphenol	<0.063		0.19	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Naphthalene	<0.0058		0.037	0.0058	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitroaniline	<0.051		0.19	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3-Nitroaniline	<0.12		0.37	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Nitroaniline	<0.16		0.37	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene	<0.0094		0.037	0.0094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitrophenol	<0.089		0.37	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.36		0.76	0.36	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodi-n-propylamine	<0.046		0.076	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodiphenylamine	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,2'-oxybis[1-chloropropane]	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Pentachlorophenol	<0.60		0.76	0.60	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Phenanthrene</b>	<b>0.071</b>		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Phenol	<0.084		0.19	0.084	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Pyrene</b>	<b>0.18</b>		0.037	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2,4-Trichlorobenzene	<0.041		0.19	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,5-Trichlorophenol	<0.086		0.37	0.086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,6-Trichlorophenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	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				06/12/18 07:02	06/13/18 20:51	1
2-Fluorophenol	116		46 - 133				06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 20:51	1
Phenol-d5	109		46 - 125				06/12/18 07:02	06/13/18 20:51	1
Terphenyl-d14	104		35 - 160				06/12/18 07:02	06/13/18 20:51	1
2,4,6-Tribromophenol	80		25 - 139				06/12/18 07:02	06/13/18 20:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.31</b>	<b>J</b>	1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Arsenic</b>	<b>6.7</b>		0.57	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Barium</b>	<b>62</b>		0.57	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Beryllium</b>	<b>0.61</b>		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cadmium</b>	<b>0.51</b>	<b>B</b>	0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Chromium</b>	<b>19</b>		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cobalt</b>	<b>9.1</b>		0.28	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Copper</b>	<b>31</b>		0.57	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Iron</b>	<b>16000</b>	<b>B</b>	11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Lead</b>	<b>200</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Magnesium</b>	<b>10000</b>	<b>B</b>	5.7	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Calcium</b>	<b>15000</b>	<b>B</b>	11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Manganese</b>	<b>370</b>		0.57	0.083	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Nickel</b>	<b>21</b>		0.57	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Selenium</b>	<b>1.0</b>		0.57	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Silver</b>	<b>0.28</b>		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
Thallium	<0.28		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Vanadium</b>	<b>23</b>		0.28	0.067	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Zinc</b>	<b>100</b>		1.1	0.50	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Potassium</b>	<b>1600</b>		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Sodium</b>	<b>460</b>		57	8.4	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Cadmium</b>	<b>0.0040</b>	<b>J</b>	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:22	1
Lead	0.034		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:22	1
Magnesium	90		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Manganese	0.91		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Zinc	0.086 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	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		06/12/18 15:23	06/14/18 00:23	1
Manganese	0.42		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:23	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		06/12/18 16:35	06/13/18 13:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:55	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		06/12/18 14:05	06/14/18 07:31	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086 B		0.018	0.0061	mg/Kg	✉	06/08/18 16:15	06/12/18 17:05	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.57	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.4		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

Date Collected: 06/05/18 08:55

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-4**

Matrix: Solid

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0093	J	0.016	0.0071	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromomethane	<0.0015	*	0.0041	0.0015	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon disulfide	<0.00085		0.0041	0.00085	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon tetrachloride	<0.00047		0.0016	0.00047	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chlorobenzene	<0.00060		0.0016	0.00060	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroethane	<0.0012	*	0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloromethane	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,3-Dichloropropene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Dibromochloromethane	<0.00053		0.0016	0.00053	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloropropane	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,3-Dichloropropene, Total	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Ethylbenzene	<0.00078		0.0016	0.00078	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Styrene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2,2-Tetrachloroethane	<0.00052		0.0016	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Tetrachloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Toluene	<0.00041		0.0016	0.00041	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,2-Dichloroethene	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,3-Dichloropropene	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2-Trichloroethane	<0.00070		0.0016	0.00070	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Trichloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl chloride	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Xylenes, Total	<0.00052		0.0033	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131			1
Dibromofluoromethane	105		75 - 126			1
1,2-Dichloroethane-d4 (Surr)	109		70 - 134			1
Toluene-d8 (Surr)	112		75 - 124			1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-ethylhexyl) phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Butyl benzyl phthalate	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chloronaphthalene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chlorophenol	<0.069		0.20	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Chrysene</b>	<b>0.017</b>	<b>J</b>	0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenz(a,h)anthracene	<0.0078		0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,4-Dichlorobenzene	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dichlorophenol	<0.096		0.40	0.096	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dimethyl phthalate	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrophenol	<0.71		0.81	0.71	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrotoluene	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-octyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.040	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Fluorene	<0.0057		0.040	0.0057	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.010</b>	<b>J</b>	0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylnaphthalene	<0.0074		0.081	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Naphthalene	<0.0062		0.040	0.0062	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitrophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodiphenylamine	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,2'-oxybis[1-chloropropane]	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Pentachlorophenol	<0.65		0.81	0.65	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Phenanthrene</b>	<b>0.0078 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Phenol	<0.090		0.20	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Pyrene</b>	<b>0.019 J</b>		0.040	0.0080	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,5-Trichlorophenol	<0.092		0.40	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	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	98			44 - 121			06/12/18 07:02	06/13/18 21:19	1
2-Fluorophenol	120			46 - 133			06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene-d5	91			41 - 120			06/12/18 07:02	06/13/18 21:19	1
Phenol-d5	109			46 - 125			06/12/18 07:02	06/13/18 21:19	1
Terphenyl-d14	109			35 - 160			06/12/18 07:02	06/13/18 21:19	1
2,4,6-Tribromophenol	81			25 - 139			06/12/18 07:02	06/13/18 21:19	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.38 J</b>		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Arsenic</b>	<b>6.2</b>		0.60	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Barium</b>	<b>81</b>		0.60	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Beryllium</b>	<b>0.53</b>		0.24	0.056	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cadmium</b>	<b>0.36 B</b>		0.12	0.022	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Chromium</b>	<b>13</b>		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cobalt</b>	<b>16</b>		0.30	0.079	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Copper</b>	<b>22</b>		0.60	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Iron</b>	<b>18000 B</b>		12	6.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Lead</b>	<b>30</b>		0.30	0.14	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Magnesium</b>	<b>19000 B</b>		6.0	3.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Calcium</b>	<b>30000 B</b>		12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Manganese</b>	<b>870</b>		0.60	0.087	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Nickel</b>	<b>30</b>		0.60	0.18	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Selenium</b>	<b>0.79</b>		0.60	0.35	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Silver</b>	<b>0.27 J</b>		0.30	0.078	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
Thallium	<0.30		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Vanadium</b>	<b>26</b>		0.30	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Zinc</b>	<b>46</b>		1.2	0.53	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Sodium</b>	<b>250</b>		60	8.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
<b>Barium</b>	<b>0.28 J</b>		0.50	0.050	mg/L		06/12/18 16:35	06/13/18 22:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/12/18 16:35	06/13/18 22:26	1
<b>Cadmium</b>	<b>0.0039 J</b>		0.0050	0.0020	mg/L		06/12/18 16:35	06/13/18 22:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:26	1
Lead	0.015		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:26	1
Magnesium	140		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Manganese	1.1		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.17		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:35	1
Manganese	0.36		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:35	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		06/12/18 16:35	06/13/18 13:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:56	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		06/12/18 14:05	06/14/18 07:33	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.020	0.0066	mg/Kg	✉	06/08/18 16:15	06/12/18 17:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.59	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	7.8		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

Date Collected: 06/05/18 09:15

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-5**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0073		0.017	0.0073	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chlorobenzene	<0.00062		0.0017	0.00062	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2-Trichloroethane	<0.00072		0.0017	0.00072	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 131	06/06/18 09:41	06/19/18 00:48	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	06/06/18 09:41	06/19/18 00:48	1
Toluene-d8 (Surr)	113		75 - 124	06/06/18 09:41	06/19/18 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Benzo[a]anthracene	0.036 J		0.040	0.0054	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15

Matrix: Solid

Date Received: 06/05/18 18:30

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	0.045		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[g,h,i]perylene	0.025 J		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[k]fluoranthene	0.018 J		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Carbazole	0.12 J		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloroaniline	<0.19		0.80	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Chrysene	0.049		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4,6-Dinitro-2-methylphenol	<0.32		0.80	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrophenol	<0.70		0.80	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,6-Dinitrotoluene	<0.078		0.20	0.078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluoranthene	0.070		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobenzene	<0.0093		0.080	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorocyclopentadiene	<0.23		0.80	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Indeno[1,2,3-cd]pyrene	0.022 J		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylnaphthalene	<0.0073		0.080	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

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	<0.38		0.80	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodi-n-propylamine	<0.049		0.080	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Pentachlorophenol	<0.64		0.80	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Phenanthrene</b>	<b>0.030 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Pyrene</b>	<b>0.065</b>		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	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				06/12/18 07:02	06/13/18 21:46	1
2-Fluorophenol	120		46 - 133				06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 21:46	1
Phenol-d5	104		46 - 125				06/12/18 07:02	06/13/18 21:46	1
Terphenyl-d14	103		35 - 160				06/12/18 07:02	06/13/18 21:46	1
2,4,6-Tribromophenol	81		25 - 139				06/12/18 07:02	06/13/18 21:46	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Arsenic</b>	<b>5.2</b>		0.56	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Barium</b>	<b>56</b>		0.56	0.064	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Beryllium</b>	<b>0.65</b>		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Cadmium</b>	<b>0.36 B</b>		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Chromium</b>	<b>17</b>		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Cobalt</b>	<b>9.0</b>		0.28	0.074	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Copper</b>	<b>23</b>		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Iron</b>	<b>16000 B</b>		11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Lead</b>	<b>47</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Magnesium</b>	<b>4400 B</b>		5.6	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Calcium</b>	<b>3900 B</b>		11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Manganese</b>	<b>300</b>		0.56	0.082	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Nickel</b>	<b>25</b>		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Selenium</b>	<b>0.68</b>		0.56	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Silver</b>	<b>0.24 J</b>		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Thallium	<0.28		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Vanadium</b>	<b>25</b>		0.28	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Zinc</b>	<b>64</b>		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Potassium</b>	<b>1700</b>		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Sodium</b>	<b>390</b>		56	8.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
<b>Barium</b>	<b>0.27 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
<b>Cadmium</b>	<b>0.0046 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Copper	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Iron	0.38 J		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:30	1
Lead	0.016		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:30	1
Magnesium	46		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Manganese	0.30		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Nickel	0.015 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Potassium	1.3 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Zinc	0.073 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.32		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:39	1
Manganese	0.78		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:39	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		06/12/18 16:35	06/13/18 13:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:57	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		06/12/18 14:05	06/14/18 07:34	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.55	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:02	1
pH	7.6		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control 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
*	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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## 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	04-30-19

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
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

1

2

3

4

5

6

7

8

9

10

# TestAmerica

#### THE LEADER IN ENVIRONMENTAL



2417 Bond Street, University Park, IL 604  
Phone: 708.534.5200 Fax: 708.534.

500-146450 900

#### **Turnaround Time Required (Business Days)**

1 Day     2 Days     5 Days     7 Days     10 Days     15 Days     Other

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

Relinquished By <i>Perry</i>	Company Terraco	Date 6/05/18	Time 1615	Received By <i>Perry</i>	Company TAL	Date 6-5-18	Time 1645	Lab Courier <i>PA</i>
Relinquished By <i>O Hira</i>	Company TAL	Date 6-5-18	Time 1830	Received By <i>Shinobu</i>	Company TACI	Date 6/6/18	Time 0805	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key	Client Comments	Lab Comments:
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	No Aluminum SPLP As directed by Terracon

## ***Chain of Custody Record***

Lab Job #: 500-146450

**Chain of Custody Number:**

Page \_\_\_\_\_ of \_\_\_\_\_

Page        of

Temperature °C of Cooler: 23, 54, 55, 65, 66

- Preservative Key

  1. HCl, Cool to 4°
  2. H<sub>2</sub>SO<sub>4</sub>, Cool to 4°
  3. HNO<sub>3</sub>, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO<sub>4</sub>
  7. Cool to 4°
  8. None
  9. Other

## Comments

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-146450-1

**Login Number: 146450**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	2.3,5.4,5.1,5.6
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 <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

# 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: 500-146393-1

Client Project/Site: IDOT - Morton Grove - WO 049

For:

Terracon Consulting Eng & Scientists

192 Exchange Blvd

Glendale Heights, Illinois 60139

Attn: Mr. Matthew Weiss

A handwritten signature in black ink, appearing to read "Richard Wright".

Authorized for release by:

6/18/2018 4:26:03 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?

Ask  
The  
Expert

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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	4
Sample Summary .....	13
Client Sample Results .....	14
Definitions .....	54
Certification Summary .....	55
Chain of Custody .....	56
Receipt Checklists .....	58

# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

## Job ID: 500-146393-1

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-146393-1

### Comments

No additional comments.

### Receipt

The samples were received on 6/4/2018 6:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 4.3° C.

### GC/MS VOA

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following samples : 2409V-1-B07 (10-13) (500-146393-9). The samples show evidence of matrix interference and were re-analyzed with confirming results. The best data were reported

Method(s) 8260B: The following samples detected Acetone above the reporting limit: 2409V-1-G01 (500-146393-1). The method blank 437055 associated with the samples did not detect Acetone. Since Acetone is a known lab contaminant, results below 3X the reporting limit should be suspected lab contamination. The results have been flagged with a "cn" flag to denote the possible lab contamination.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 436857 recovered outside control limits for the following analytes: Acetone.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 436543 recovered outside control limits for the following analytes: Bromomethane,

Method(s) 8260B: The following analyte recovered outside control limits for the LCS/LCSD associated with batches 436543 and 436857: Bromomethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for 436543 recovered outside control limits for the following analytes: 2-Hexanone, Methyl isobutyl ketone, 1,1,2,2-Tetrachloroethane, Chloroethane, Vinyl Chloride, and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data 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 samples contained one acid surrogate and/or one base surrogate outside acceptance limits: 2409V-1-G01 (500-146393-1) and (MB 500-435493/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

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

### Metals

Method(s) 6020A: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: 2409V-1-G01 (500-146393-1).

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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-G01**

**Lab Sample ID: 500-146393-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0083	cn	0.0050	0.0017	mg/L	1		8260B	Total/NA
Toluene	0.00031	J	0.00050	0.00015	mg/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	0.0040	J	0.0079	0.0013	mg/L	1		8270D	Total/NA
Antimony	0.0028	J	0.0030	0.0013	mg/L	1		6020A	Total Recoverable
Arsenic	0.084		0.0010	0.00023	mg/L	1		6020A	Total Recoverable
Barium	0.61		0.013	0.0037	mg/L	5		6020A	Total Recoverable
Cadmium	0.0067		0.00050	0.00017	mg/L	1		6020A	Total Recoverable
Calcium	630		2.0	0.44	mg/L	10		6020A	Total Recoverable
Chromium	0.77		0.050	0.011	mg/L	10		6020A	Total Recoverable
Cobalt	0.18		0.010	0.0040	mg/L	10		6020A	Total Recoverable
Copper	0.36	B	0.0020	0.00050	mg/L	1		6020A	Total Recoverable
Iron	220		1.0	0.47	mg/L	10		6020A	Total Recoverable
Lead	0.13		0.00050	0.00019	mg/L	1		6020A	Total Recoverable
Magnesium	270		2.0	0.49	mg/L	10		6020A	Total Recoverable
Manganese	11		0.025	0.0079	mg/L	10		6020A	Total Recoverable
Nickel	0.37		0.020	0.0063	mg/L	10		6020A	Total Recoverable
Potassium	14		5.0	1.1	mg/L	10		6020A	Total Recoverable
Selenium	0.0095		0.0025	0.00098	mg/L	1		6020A	Total Recoverable
Silver	0.00021	J	0.00050	0.00012	mg/L	1		6020A	Total Recoverable
Sodium	13		2.0	0.77	mg/L	10		6020A	Total Recoverable
Vanadium	0.20		0.050	0.022	mg/L	10		6020A	Total Recoverable
Zinc	0.78		0.020	0.0069	mg/L	1		6020A	Total Recoverable
Mercury	0.00028		0.00020	0.000098	mg/L	1		7470A	Total/NA

**Client Sample ID: 2409V-1-B09 (0-5)**

**Lab Sample ID: 500-146393-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.016	J	0.035	0.0064	mg/Kg	1	⊗	8270D	Total/NA
Acenaphthylene	0.012	J	0.035	0.0047	mg/Kg	1	⊗	8270D	Total/NA
Anthracene	0.061		0.035	0.0060	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]anthracene	0.27		0.035	0.0048	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.29		0.035	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.41		0.035	0.0077	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.11		0.035	0.012	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.13		0.035	0.011	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.14	J	0.18	0.089	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (0-5) (Continued)**

**Lab Sample ID: 500-146393-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.30		0.035	0.0097	mg/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	0.035		0.035	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.55		0.035	0.0066	mg/Kg	1	⊗	8270D	Total/NA
Fluorene	0.015 J		0.035	0.0050	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.10		0.035	0.0093	mg/Kg	1	⊗	8270D	Total/NA
2-Methylnaphthalene	0.041 J		0.072	0.0066	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.25		0.035	0.0050	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.45		0.035	0.0071	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.32 J F1		1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	2.8		0.53	0.18	mg/Kg	1	⊗	6010B	Total/NA
Barium	33 F2 F1		0.53	0.060	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.42		0.21	0.050	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.34 B		0.11	0.019	mg/Kg	1	⊗	6010B	Total/NA
Chromium	10		0.53	0.26	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	3.7		0.27	0.070	mg/Kg	1	⊗	6010B	Total/NA
Copper	15		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	8500		11	5.5	mg/Kg	1	⊗	6010B	Total/NA
Lead	98		0.27	0.12	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	45000		5.3	2.6	mg/Kg	1	⊗	6010B	Total/NA
Calcium	110000 B F2		110	18	mg/Kg	10	⊗	6010B	Total/NA
Manganese	230		0.53	0.077	mg/Kg	1	⊗	6010B	Total/NA
Nickel	9.5		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.43 J		0.53	0.31	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.12 J		0.27	0.068	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	⊗	6010B	Total/NA
Zinc	57 F1		1.1	0.47	mg/Kg	1	⊗	6010B	Total/NA
Potassium	790 F1		27	9.4	mg/Kg	1	⊗	6010B	Total/NA
Sodium	690		53	7.9	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.37 J		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0047 J		0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	410		5.0	0.50	mg/L	1		6010B	TCLP
Lead	0.011		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.90		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039 B		0.025	0.010	mg/L	1		6010B	TCLP
Potassium	2.4 J		2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.072 J		0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.23		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.39		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.017	0.0058	mg/Kg	1	⊗	7471B	Total/NA
pH	8.9		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B09 (5-8)**

**Lab Sample ID: 500-146393-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.022		0.014	0.0063	mg/Kg	1	⊗	8260B	Total/NA
Chrysene	0.010 J		0.036	0.010	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.013 J		0.036	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	5.1		0.56	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	27		0.56	0.064	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (5-8) (Continued)**

**Lab Sample ID: 500-146393-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.66		0.22	0.052	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.23	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.5		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Copper	25		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	17000		11	5.8	mg/Kg	1	⊗	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	31000		5.6	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	80000	B	110	19	mg/Kg	10	⊗	6010B	Total/NA
Manganese	350		0.56	0.081	mg/Kg	1	⊗	6010B	Total/NA
Nickel	30		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.88		0.56	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.19	J	0.28	0.072	mg/Kg	1	⊗	6010B	Total/NA
Thallium	0.38	J	0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	16		0.28	0.066	mg/Kg	1	⊗	6010B	Total/NA
Zinc	56		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	2200		28	9.9	mg/Kg	1	⊗	6010B	Total/NA
Sodium	270		56	8.3	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.42	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0044	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	490		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	120		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	2.7		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.20		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	8.4		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B08 (0-5)**

**Lab Sample ID: 500-146393-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.018	J	0.039	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.039	0.013	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.019	J	0.039	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.027	J	0.039	0.0072	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.039	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.012	J	0.039	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.029	J	0.039	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	6.6		0.56	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	52		0.56	0.064	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.63		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.22	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	7.4		0.28	0.074	mg/Kg	1	⊗	6010B	Total/NA
Copper	16		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	15000		11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	28		0.28	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) (Continued)**

**Lab Sample ID: 500-146393-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	3400		5.6	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3700	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	220		0.56	0.082	mg/Kg	1	⊗	6010B	Total/NA
Nickel	20		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		0.56	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.25	J	0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	20		0.28	0.066	mg/Kg	1	⊗	6010B	Total/NA
Zinc	57		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1000		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	100		56	8.3	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Calcium	74		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.52		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	22		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.061		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.036		0.019	0.0063	mg/Kg	1	⊗	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B08 (0-5) Dup**

**Lab Sample ID: 500-146393-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.028	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.035	J	0.040	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.041		0.040	0.0087	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.012	J	0.040	0.012	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.10	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.033	J	0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.048		0.040	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.017	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.021	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.049		0.040	0.0080	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	6.9		0.57	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	74		0.57	0.065	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.72		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.28	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	12		0.28	0.074	mg/Kg	1	⊗	6010B	Total/NA
Copper	18		0.57	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	18000		11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	25		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	4100		5.7	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3800	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	530		0.57	0.082	mg/Kg	1	⊗	6010B	Total/NA
Nickel	29		0.57	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.3		0.57	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.29		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	23		0.28	0.067	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) Dup (Continued)**

**Lab Sample ID: 500-146393-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	66		1.1	0.50	mg/Kg	1	*	6010B	Total/NA
Potassium	1200		28	10	mg/Kg	1	*	6010B	Total/NA
Sodium	110		57	8.4	mg/Kg	1	*	6010B	Total/NA
Barium	0.19	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	78		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.63		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	24		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.067		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033	B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.4	J	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.041		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: 2409V-1-B08 (5-8)**

**Lab Sample ID: 500-146393-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.014	0.0061	mg/Kg	1	*	8260B	Total/NA
Chrysene	0.018	J	0.036	0.0098	mg/Kg	1	*	8270D	Total/NA
2-Methylnaphthalene	0.033	J	0.072	0.0066	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.030	J	0.036	0.0050	mg/Kg	1	*	8270D	Total/NA
Arsenic	6.8		0.56	0.19	mg/Kg	1	*	6010B	Total/NA
Barium	31		0.56	0.064	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.58		0.22	0.052	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	*	6010B	Total/NA
Chromium	12		0.56	0.28	mg/Kg	1	*	6010B	Total/NA
Cobalt	11		0.28	0.074	mg/Kg	1	*	6010B	Total/NA
Copper	23		0.56	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	16000		11	5.8	mg/Kg	1	*	6010B	Total/NA
Lead	21		0.28	0.13	mg/Kg	1	*	6010B	Total/NA
Magnesium	29000		5.6	2.8	mg/Kg	1	*	6010B	Total/NA
Calcium	80000	B	110	19	mg/Kg	10	*	6010B	Total/NA
Manganese	390		0.56	0.081	mg/Kg	1	*	6010B	Total/NA
Nickel	27		0.56	0.16	mg/Kg	1	*	6010B	Total/NA
Selenium	0.71		0.56	0.33	mg/Kg	1	*	6010B	Total/NA
Silver	0.18	J	0.28	0.072	mg/Kg	1	*	6010B	Total/NA
Vanadium	14		0.28	0.066	mg/Kg	1	*	6010B	Total/NA
Zinc	40		1.1	0.49	mg/Kg	1	*	6010B	Total/NA
Potassium	2000		28	9.9	mg/Kg	1	*	6010B	Total/NA
Sodium	150		56	8.3	mg/Kg	1	*	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	540		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	42		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	3.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.062	B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.6		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.066		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (5-8) (Continued)**

**Lab Sample ID: 500-146393-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.018		0.017	0.0058	mg/Kg	1	⊗	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B07 (0-5)**

**Lab Sample ID: 500-146393-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.016	0.0069	mg/Kg	1	⊗	8260B	Total/NA
Arsenic	4.0		0.55	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	52		0.55	0.063	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.64		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	15		0.55	0.27	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	7.1		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Copper	17		0.55	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	18000		11	5.8	mg/Kg	1	⊗	6010B	Total/NA
Lead	12		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	4200		5.5	2.7	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3600	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	190		0.55	0.080	mg/Kg	1	⊗	6010B	Total/NA
Nickel	21		0.55	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.97		0.55	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.23	J	0.28	0.071	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	21		0.28	0.065	mg/Kg	1	⊗	6010B	Total/NA
Zinc	54		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	910		28	9.8	mg/Kg	1	⊗	6010B	Total/NA
Sodium	410		55	8.2	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.21	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	100		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.23	J	0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	43		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.71	J	2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0061	mg/Kg	1	⊗	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B07 (5-10)**

**Lab Sample ID: 500-146393-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.013	0.0056	mg/Kg	1	⊗	8260B	Total/NA
Phenanthrene	0.019	J	0.037	0.0052	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	5.7		0.53	0.18	mg/Kg	1	⊗	6010B	Total/NA
Barium	32		0.53	0.060	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.61		0.21	0.050	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.19	B	0.11	0.019	mg/Kg	1	⊗	6010B	Total/NA
Chromium	13		0.53	0.26	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	10		0.27	0.069	mg/Kg	1	⊗	6010B	Total/NA
Copper	24		0.53	0.15	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (5-10) (Continued)**

**Lab Sample ID: 500-146393-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	16000		11	5.5	mg/Kg	1	⊗	6010B	Total/NA
Lead	11		0.27	0.12	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	28000		5.3	2.6	mg/Kg	1	⊗	6010B	Total/NA
Calcium	82000	B	110	18	mg/Kg	10	⊗	6010B	Total/NA
Manganese	380		0.53	0.077	mg/Kg	1	⊗	6010B	Total/NA
Nickel	27		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.91		0.53	0.31	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.18	J	0.27	0.068	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	15		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	9.4	mg/Kg	1	⊗	6010B	Total/NA
Sodium	140		53	7.8	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Calcium	570		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	45		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054	B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.8		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.049		0.025	0.010	mg/L	1		6010B	SPL East
Mercury	0.016	J	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: 2409V-1-B07 (10-13)**

**Lab Sample ID: 500-146393-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021	*	0.017	0.0074	mg/Kg	1	⊗	8260B	Total/NA
Phenanthrene	0.037		0.036	0.0051	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.010	J	0.036	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	6.1		0.53	0.18	mg/Kg	1	⊗	6010B	Total/NA
Barium	26		0.53	0.060	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.57		0.21	0.049	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.19	B	0.11	0.019	mg/Kg	1	⊗	6010B	Total/NA
Chromium	11		0.53	0.26	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.7		0.26	0.069	mg/Kg	1	⊗	6010B	Total/NA
Copper	24		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	15000		11	5.5	mg/Kg	1	⊗	6010B	Total/NA
Lead	10		0.26	0.12	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	41000		5.3	2.6	mg/Kg	1	⊗	6010B	Total/NA
Calcium	110000	B	110	18	mg/Kg	10	⊗	6010B	Total/NA
Manganese	430		0.53	0.077	mg/Kg	1	⊗	6010B	Total/NA
Nickel	24		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		0.53	0.31	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.18	J	0.26	0.068	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	13		0.26	0.062	mg/Kg	1	⊗	6010B	Total/NA
Zinc	41		1.1	0.46	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1900		26	9.4	mg/Kg	1	⊗	6010B	Total/NA
Sodium	210		53	7.8	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.54		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

## Client Sample ID: 2409V-1-B07 (10-13) (Continued)

## Lab Sample ID: 500-146393-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	540		5.0	0.50	mg/L	1		6010B	TCLP
Cobalt	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Copper	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Magnesium	55		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.073	B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	4.8		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.043		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		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: 2409V-1-B06 (0-3)

## Lab Sample ID: 500-146393-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014	J	0.015	0.0065	mg/Kg	1	⊗	8260B	Total/NA
Acenaphthene	0.0090	J	0.037	0.0067	mg/Kg	1	⊗	8270D	Total/NA
Acenaphthylene	0.013	J	0.037	0.0049	mg/Kg	1	⊗	8270D	Total/NA
Anthracene	0.040		0.037	0.0062	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]anthracene	0.25		0.037	0.0050	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.27		0.037	0.0072	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.39		0.037	0.0080	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.14		0.037	0.012	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.16		0.037	0.011	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.14	J	0.19	0.093	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.30		0.037	0.010	mg/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	0.045		0.037	0.0072	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.44		0.037	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Fluorene	0.0091	J	0.037	0.0052	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.037	0.0097	mg/Kg	1	⊗	8270D	Total/NA
2-Methylnaphthalene	0.011	J	0.075	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.16		0.037	0.0052	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.40		0.037	0.0074	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	3.9		0.53	0.18	mg/Kg	1	⊗	6010B	Total/NA
Barium	45		0.53	0.061	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.51		0.21	0.050	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.29	B	0.11	0.019	mg/Kg	1	⊗	6010B	Total/NA
Chromium	12		0.53	0.26	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	5.6		0.27	0.070	mg/Kg	1	⊗	6010B	Total/NA
Copper	20		0.53	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	12000		11	5.5	mg/Kg	1	⊗	6010B	Total/NA
Lead	160		0.27	0.12	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	5700		5.3	2.6	mg/Kg	1	⊗	6010B	Total/NA
Calcium	8700	B	11	1.8	mg/Kg	1	⊗	6010B	Total/NA
Manganese	180		0.53	0.077	mg/Kg	1	⊗	6010B	Total/NA
Nickel	15		0.53	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0		0.53	0.31	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.17	J	0.27	0.069	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	15		0.27	0.063	mg/Kg	1	⊗	6010B	Total/NA
Zinc	62		1.1	0.47	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B06 (0-3) (Continued)**

**Lab Sample ID: 500-146393-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	830		27	9.4	mg/Kg	1	⊗	6010B	Total/NA
Sodium	820		53	7.9	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.29	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0037	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	180		5.0	0.50	mg/L	1		6010B	TCLP
Lead	0.064		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	76		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.62		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J B	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.71	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.032	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.45		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.55		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.018	0.0060	mg/Kg	1	⊗	7471B	Total/NA
pH	8.0		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146393-1	2409V-1-G01	Water	06/04/18 15:10	06/04/18 18:10
500-146393-2	2409V-1-B09 (0-5)	Solid	06/04/18 10:45	06/04/18 18:10
500-146393-3	2409V-1-B09 (5-8)	Solid	06/04/18 10:50	06/04/18 18:10
500-146393-4	2409V-1-B08 (0-5)	Solid	06/04/18 11:35	06/04/18 18:10
500-146393-5	2409V-1-B08 (0-5) Dup	Solid	06/04/18 11:40	06/04/18 18:10
500-146393-6	2409V-1-B08 (5-8)	Solid	06/04/18 11:45	06/04/18 18:10
500-146393-7	2409V-1-B07 (0-5)	Solid	06/04/18 14:20	06/04/18 18:10
500-146393-8	2409V-1-B07 (5-10)	Solid	06/04/18 14:25	06/04/18 18:10
500-146393-9	2409V-1-B07 (10-13)	Solid	06/04/18 14:30	06/04/18 18:10
500-146393-10	2409V-1-B06 (0-3)	Solid	06/04/18 15:50	06/04/18 18:10

1

2

3

4

5

6

7

8

9

10

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-G01**

**Date Collected: 06/04/18 15:10**

**Date Received: 06/04/18 18:10**

**Lab Sample ID: 500-146393-1**

**Matrix: Water**

**Method: 8260B - VOC**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>0.0083</b>	<b>cn</b>	0.0050	0.0017	mg/L			06/15/18 12:04	1
Benzene	<0.00015		0.00050	0.00015	mg/L			06/15/18 12:04	1
Bromodichloromethane	<0.00037		0.0010	0.00037	mg/L			06/15/18 12:04	1
Bromoform	<0.00048		0.0010	0.00048	mg/L			06/15/18 12:04	1
Bromomethane	<0.00080		0.0020	0.00080	mg/L			06/15/18 12:04	1
Carbon disulfide	<0.00045		0.0020	0.00045	mg/L			06/15/18 12:04	1
Carbon tetrachloride	<0.00038		0.0010	0.00038	mg/L			06/15/18 12:04	1
Chlorobenzene	<0.00039		0.0010	0.00039	mg/L			06/15/18 12:04	1
Chloroethane	<0.00051		0.0010	0.00051	mg/L			06/15/18 12:04	1
Chloroform	<0.00037		0.0020	0.00037	mg/L			06/15/18 12:04	1
Chloromethane	<0.00032		0.0010	0.00032	mg/L			06/15/18 12:04	1
cis-1,2-Dichloroethene	<0.00041		0.0010	0.00041	mg/L			06/15/18 12:04	1
cis-1,3-Dichloropropene	<0.00042		0.0010	0.00042	mg/L			06/15/18 12:04	1
Dibromochloromethane	<0.00049		0.0010	0.00049	mg/L			06/15/18 12:04	1
1,1-Dichloroethane	<0.00041		0.0010	0.00041	mg/L			06/15/18 12:04	1
1,2-Dichloroethane	<0.00039		0.0010	0.00039	mg/L			06/15/18 12:04	1
1,1-Dichloroethene	<0.00039		0.0010	0.00039	mg/L			06/15/18 12:04	1
1,2-Dichloropropane	<0.00043		0.0010	0.00043	mg/L			06/15/18 12:04	1
1,3-Dichloropropene, Total	<0.00042		0.0010	0.00042	mg/L			06/15/18 12:04	1
Ethylbenzene	<0.00018		0.00050	0.00018	mg/L			06/15/18 12:04	1
2-Hexanone	<0.0016		0.0050	0.0016	mg/L			06/15/18 12:04	1
Methylene Chloride	<0.0016		0.0050	0.0016	mg/L			06/15/18 12:04	1
Methyl Ethyl Ketone	<0.0021		0.0050	0.0021	mg/L			06/15/18 12:04	1
methyl isobutyl ketone	<0.0022		0.0050	0.0022	mg/L			06/15/18 12:04	1
Methyl tert-butyl ether	<0.00039		0.0010	0.00039	mg/L			06/15/18 12:04	1
Styrene	<0.00039		0.0010	0.00039	mg/L			06/15/18 12:04	1
1,1,2,2-Tetrachloroethane	<0.00040		0.0010	0.00040	mg/L			06/15/18 12:04	1
Tetrachloroethene	<0.00037		0.0010	0.00037	mg/L			06/15/18 12:04	1
<b>Toluene</b>	<b>0.00031</b>	<b>J</b>	0.00050	0.00015	mg/L			06/15/18 12:04	1
trans-1,2-Dichloroethene	<0.00035		0.0010	0.00035	mg/L			06/15/18 12:04	1
trans-1,3-Dichloropropene	<0.00036		0.0010	0.00036	mg/L			06/15/18 12:04	1
1,1,1-Trichloroethane	<0.00038		0.0010	0.00038	mg/L			06/15/18 12:04	1
1,1,2-Trichloroethane	<0.00035		0.0010	0.00035	mg/L			06/15/18 12:04	1
Trichloroethene	<0.00016		0.00050	0.00016	mg/L			06/15/18 12:04	1
Vinyl acetate	<0.00091		0.0020	0.00091	mg/L			06/15/18 12:04	1
Vinyl chloride	<0.00020		0.0010	0.00020	mg/L			06/15/18 12:04	1
Xylenes, Total	<0.00022		0.0010	0.00022	mg/L			06/15/18 12:04	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		06/15/18 12:04	1
Dibromofluoromethane	99		75 - 120		06/15/18 12:04	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 126		06/15/18 12:04	1
Toluene-d8 (Surr)	96		75 - 120		06/15/18 12:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.00024		0.00079	0.00024	mg/L		06/05/18 17:26	06/14/18 00:12	1
Acenaphthylene	<0.00021		0.00079	0.00021	mg/L		06/05/18 17:26	06/14/18 00:12	1
Anthracene	<0.00026		0.00079	0.00026	mg/L		06/05/18 17:26	06/14/18 00:12	1
Benzo[a]anthracene	<0.000045		0.00013	0.000045	mg/L		06/05/18 17:26	06/14/18 00:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-G01**

**Lab Sample ID: 500-146393-1**

**Matrix: Water**

Date Collected: 06/04/18 15:10

Date Received: 06/04/18 18:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.000078		0.00016	0.000078	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Benzo[b]fluoranthene	<0.000064		0.00016	0.000064	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Benzo[g,h,i]perylene	<0.000030		0.00079	0.000030	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Benzo[k]fluoranthene	<0.000050		0.00016	0.000050	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Bis(2-chloroethoxy)methane	<0.000022		0.0016	0.00022	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Bis(2-chloroethyl)ether	<0.000023		0.0016	0.00023	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.0040</b>	<b>J</b>	0.0079	0.0013	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4-Bromophenyl phenyl ether	<0.000043		0.0039	0.00043	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Butyl benzyl phthalate	<0.000038		0.0016	0.00038	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Carbazole	<0.000028		0.0039	0.00028	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4-Chloroaniline	<0.0016		0.0079	0.0016	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4-Chloro-3-methylphenol	<0.0018		0.0079	0.0018	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Chloronaphthalene	<0.000019		0.0016	0.00019	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Chlorophenol	<0.000044		0.0039	0.00044	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4-Chlorophenyl phenyl ether	<0.000050		0.0039	0.00050	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Chrysene	<0.000054		0.00016	0.000054	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Dibenz(a,h)anthracene	<0.000040		0.00024	0.000040	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Dibenzofuran	<0.000021		0.0016	0.00021	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
1,2-Dichlorobenzene	<0.000019		0.0016	0.00019	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
1,3-Dichlorobenzene	<0.000016		0.0016	0.00016	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
1,4-Dichlorobenzene	<0.000016		0.0016	0.00016	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
3,3'-Dichlorobenzidine	<0.0013		0.0039	0.0013	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2,4-Dichlorophenol	<0.0020		0.0079	0.0020	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Diethyl phthalate	<0.000028		0.0039	0.00028	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2,4-Dimethylphenol	<0.0014		0.0079	0.0014	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Dimethyl phthalate	<0.000025		0.0039	0.00025	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Di-n-butyl phthalate	<0.000058		0.0039	0.00058	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4,6-Dinitro-2-methylphenol	<0.0046		0.016	0.0046	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2,4-Dinitrophenol	<0.0068		0.016	0.0068	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2,4-Dinitrotoluene	<0.000019		0.00079	0.00019	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2,6-Dinitrotoluene	<0.000058		0.00079	0.000058	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Di-n-octyl phthalate	<0.000083		0.0079	0.00083	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Fluoranthene	<0.000036		0.00079	0.00036	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Fluorene	<0.000019		0.00079	0.00019	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Hexachlorobenzene	<0.000063		0.00039	0.000063	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Hexachlorobutadiene	<0.00041		0.0039	0.00041	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Hexachlorocyclopentadiene	<0.0050		0.016	0.0050	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Hexachloroethane	<0.00047		0.0039	0.00047	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Indeno[1,2,3-cd]pyrene	<0.000059		0.00016	0.000059	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Isophorone	<0.000030		0.0016	0.00030	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Methylnaphthalene	<0.000051		0.0016	0.000051	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Methylphenol	<0.000024		0.0016	0.00024	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
3 & 4 Methylphenol	<0.000035		0.0016	0.00035	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Naphthalene	<0.000024		0.00079	0.00024	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Nitroaniline	<0.0010		0.0039	0.0010	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
3-Nitroaniline	<0.0014		0.0079	0.0014	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
4-Nitroaniline	<0.0013		0.0079	0.0013	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
Nitrobenzene	<0.000035		0.00079	0.00035	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1
2-Nitrophenol	<0.0020		0.0079	0.0020	mg/L	06/05/18 17:26	06/14/18 00:12	06/14/18 00:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-G01**

**Lab Sample ID: 500-146393-1**

**Matrix: Water**

Date Collected: 06/04/18 15:10

Date Received: 06/04/18 18:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.0059		0.016	0.0059	mg/L		06/05/18 17:26	06/14/18 00:12	1
N-Nitrosodi-n-propylamine	<0.00012			0.00039	mg/L		06/05/18 17:26	06/14/18 00:12	1
N-Nitrosodiphenylamine	<0.00029			0.0016	mg/L		06/05/18 17:26	06/14/18 00:12	1
2,2'-oxybis[1-chloropropane]	<0.00030			0.0016	mg/L		06/05/18 17:26	06/14/18 00:12	1
Pentachlorophenol	<0.0031		0.016	0.0031	mg/L		06/05/18 17:26	06/14/18 00:12	1
Phenanthrene	<0.00024			0.00079	mg/L		06/05/18 17:26	06/14/18 00:12	1
Phenol	<0.00053			0.0039	mg/L		06/05/18 17:26	06/14/18 00:12	1
Pyrene	<0.00034			0.00079	mg/L		06/05/18 17:26	06/14/18 00:12	1
1,2,4-Trichlorobenzene	<0.00019		0.0016	0.00019	mg/L		06/05/18 17:26	06/14/18 00:12	1
2,4,5-Trichlorophenol	<0.0020			0.0079	mg/L		06/05/18 17:26	06/14/18 00:12	1
2,4,6-Trichlorophenol	<0.00056			0.0039	mg/L		06/05/18 17:26	06/14/18 00:12	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	108			34 - 110			06/05/18 17:26	06/14/18 00:12	1
2-Fluorophenol	88			27 - 110			06/05/18 17:26	06/14/18 00:12	1
Nitrobenzene-d5	105			36 - 120			06/05/18 17:26	06/14/18 00:12	1
Phenol-d5	58			20 - 100			06/05/18 17:26	06/14/18 00:12	1
Terphenyl-d14	161 X			40 - 145			06/05/18 17:26	06/14/18 00:12	1
2,4,6-Tribromophenol	108			40 - 145			06/05/18 17:26	06/14/18 00:12	1

## Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0028	J	0.0030	0.0013	mg/L		06/06/18 07:27	06/07/18 11:51	1
Arsenic	0.084		0.0010	0.00023	mg/L		06/06/18 07:27	06/07/18 11:51	1
Barium	0.61		0.013	0.0037	mg/L		06/06/18 07:27	06/07/18 16:45	5
Beryllium	<0.0053		0.010	0.0053	mg/L		06/06/18 07:27	06/07/18 16:49	10
Cadmium	0.0067			0.00050	mg/L		06/06/18 07:27	06/07/18 11:51	1
Calcium	630		2.0	0.44	mg/L		06/06/18 07:27	06/07/18 16:49	10
Chromium	0.77		0.050	0.011	mg/L		06/06/18 07:27	06/07/18 16:49	10
Cobalt	0.18		0.010	0.0040	mg/L		06/06/18 07:27	06/07/18 16:49	10
Copper	0.36	B	0.0020	0.00050	mg/L		06/06/18 07:27	06/07/18 11:51	1
Iron	220		1.0	0.47	mg/L		06/06/18 07:27	06/07/18 16:49	10
Lead	0.13			0.00050	mg/L		06/06/18 07:27	06/07/18 11:51	1
Magnesium	270		2.0	0.49	mg/L		06/06/18 07:27	06/07/18 16:49	10
Manganese	11		0.025	0.0079	mg/L		06/06/18 07:27	06/07/18 16:49	10
Nickel	0.37		0.020	0.0063	mg/L		06/06/18 07:27	06/07/18 16:49	10
Potassium	14		5.0	1.1	mg/L		06/06/18 07:27	06/07/18 16:49	10
Selenium	0.0095			0.0025	0.00098	mg/L	06/06/18 07:27	06/07/18 11:51	1
Silver	0.00021	J		0.00050	0.00012	mg/L	06/06/18 07:27	06/07/18 11:51	1
Sodium	13		2.0	0.77	mg/L		06/06/18 07:27	06/07/18 16:49	10
Thallium	<0.0029		0.010	0.0029	mg/L		06/06/18 07:27	06/07/18 16:45	5
Vanadium	0.20		0.050	0.022	mg/L		06/06/18 07:27	06/07/18 16:49	10
Zinc	0.78		0.020	0.0069	mg/L		06/06/18 07:27	06/07/18 11:51	1

## Method: 7470A - Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00028		0.00020	0.000098	mg/L		06/06/18 13:15	06/07/18 09:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-G01**

**Lab Sample ID: 500-146393-1**

Date Collected: 06/04/18 15:10

Matrix: Water

Date Received: 06/04/18 18:10

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0035		0.010	0.0035	mg/L		06/15/18 11:00	06/15/18 14:51	1

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (0-5)**

Date Collected: 06/04/18 10:45

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-2**

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0071		0.016	0.0071	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Bromomethane	<0.0015 *		0.0041	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Carbon disulfide	<0.00085		0.0041	0.00085	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Carbon tetrachloride	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Chlorobenzene	<0.00060		0.0016	0.00060	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Chloroethane	<0.0012 *		0.0041	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Chloromethane	<0.0016 *		0.0041	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
cis-1,3-Dichloropropene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Dibromochloromethane	<0.00054		0.0016	0.00054	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,1-Dichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,2-Dichloropropane	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,3-Dichloropropene, Total	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Ethylbenzene	<0.00078		0.0016	0.00078	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
2-Hexanone	<0.0013 *		0.0041	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
4-Methyl-2-pentanone (MIBK)	<0.0012 *		0.0041	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Styrene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,1,2,2-Tetrachloroethane	<0.00052 *		0.0016	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Tetrachloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Toluene	<0.00041		0.0016	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
trans-1,2-Dichloroethene	<0.00073		0.0016	0.00073	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
trans-1,3-Dichloropropene	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
1,1,2-Trichloroethane	<0.00070		0.0016	0.00070	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Trichloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Vinyl chloride	<0.00073 *		0.0016	0.00073	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1
Xylenes, Total	<0.00052		0.0033	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131	06/05/18 11:24	06/13/18 04:18	1
Dibromofluoromethane	79		75 - 126	06/05/18 11:24	06/13/18 04:18	1
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	06/05/18 11:24	06/13/18 04:18	1
Toluene-d8 (Surr)	97		75 - 124	06/05/18 11:24	06/13/18 04:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.016 J		0.035	0.0064	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Acenaphthylene	0.012 J		0.035	0.0047	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Anthracene	0.061		0.035	0.0060	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Benzo[a]anthracene	0.27		0.035	0.0048	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (0-5)**

**Lab Sample ID: 500-146393-2**

Date Collected: 06/04/18 10:45  
Date Received: 06/04/18 18:10

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.29		0.035	0.0069	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Benzo[b]fluoranthene	0.41		0.035	0.0077	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Benzo[g,h,i]perylene	0.11		0.035	0.012	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Benzo[k]fluoranthene	0.13		0.035	0.011	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Bis(2-chloroethoxy)methane	<0.036		0.18	0.036	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Bis(2-chloroethyl)ether	<0.054		0.18	0.054	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Bis(2-ethylhexyl) phthalate	<0.065		0.18	0.065	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4-Bromophenyl phenyl ether	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Butyl benzyl phthalate	<0.068		0.18	0.068	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Carbazole	0.14 J		0.18	0.089	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4-Chloroaniline	<0.17		0.72	0.17	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4-Chloro-3-methylphenol	<0.12		0.35	0.12	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Chloronaphthalene	<0.039		0.18	0.039	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Chlorophenol	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4-Chlorophenyl phenyl ether	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Chrysene	0.30		0.035	0.0097	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Dibenz(a,h)anthracene	0.035		0.035	0.0069	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Dibenzofuran	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
1,2-Dichlorobenzene	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
1,3-Dichlorobenzene	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
1,4-Dichlorobenzene	<0.046		0.18	0.046	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
3,3'-Dichlorobenzidine	<0.050		0.18	0.050	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4-Dichlorophenol	<0.085		0.35	0.085	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Diethyl phthalate	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4-Dimethylphenol	<0.14		0.35	0.14	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Dimethyl phthalate	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Di-n-butyl phthalate	<0.054		0.18	0.054	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4,6-Dinitro-2-methylphenol	<0.29		0.72	0.29	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4-Dinitrophenol	<0.63		0.72	0.63	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4-Dinitrotoluene	<0.057		0.18	0.057	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,6-Dinitrotoluene	<0.070		0.18	0.070	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Di-n-octyl phthalate	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Fluoranthene	0.55		0.035	0.0066	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Fluorene	0.015 J		0.035	0.0050	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Hexachlorobenzene	<0.0083		0.072	0.0083	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Hexachlorobutadiene	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Hexachlorocyclopentadiene	<0.21		0.72	0.21	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Hexachloroethane	<0.054		0.18	0.054	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Indeno[1,2,3-cd]pyrene	0.10		0.035	0.0093	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Isophorone	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Methylnaphthalene	0.041 J		0.072	0.0066	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Methylphenol	<0.057		0.18	0.057	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
3 & 4 Methylphenol	<0.060		0.18	0.060	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Naphthalene	<0.0055		0.035	0.0055	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Nitroaniline	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
3-Nitroaniline	<0.11		0.35	0.11	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
4-Nitroaniline	<0.15		0.35	0.15	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Nitrobenzene	<0.0089		0.035	0.0089	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2-Nitrophenol	<0.084		0.35	0.084	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (0-5)**

**Lab Sample ID: 500-146393-2**

Date Collected: 06/04/18 10:45  
Date Received: 06/04/18 18:10

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.34		0.72	0.34	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
N-Nitrosodi-n-propylamine	<0.044		0.072	0.044	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
N-Nitrosodiphenylamine	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,2'-oxybis[1-chloropropane]	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Pentachlorophenol	<0.57		0.72	0.57	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
<b>Phenanthrene</b>	<b>0.25</b>		0.035	0.0050	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
Phenol	<0.079		0.18	0.079	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
<b>Pyrene</b>	<b>0.45</b>		0.035	0.0071	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
1,2,4-Trichlorobenzene	<0.038		0.18	0.038	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4,5-Trichlorophenol	<0.081		0.35	0.081	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1
2,4,6-Trichlorophenol	<0.12		0.35	0.12	mg/Kg	⊗	06/07/18 07:15	06/14/18 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		44 - 121	06/07/18 07:15	06/14/18 13:21	1
2-Fluorophenol	121		46 - 133	06/07/18 07:15	06/14/18 13:21	1
Nitrobenzene-d5	89		41 - 120	06/07/18 07:15	06/14/18 13:21	1
Phenol-d5	113		46 - 125	06/07/18 07:15	06/14/18 13:21	1
Terphenyl-d14	99		35 - 160	06/07/18 07:15	06/14/18 13:21	1
2,4,6-Tribromophenol	77		25 - 139	06/07/18 07:15	06/14/18 13:21	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.32</b>	J F1	1.1	0.21	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Arsenic</b>	<b>2.8</b>		0.53	0.18	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Barium</b>	<b>33</b>	F2 F1	0.53	0.060	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Beryllium</b>	<b>0.42</b>		0.21	0.050	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Cadmium</b>	<b>0.34</b>	B	0.11	0.019	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Chromium</b>	<b>10</b>		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Cobalt</b>	<b>3.7</b>		0.27	0.070	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Copper</b>	<b>15</b>		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Iron</b>	<b>8500</b>		11	5.5	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Lead</b>	<b>98</b>		0.27	0.12	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Magnesium</b>	<b>45000</b>		5.3	2.6	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Calcium</b>	<b>110000</b>	B F2	110	18	mg/Kg	⊗	06/07/18 17:05	06/11/18 23:27	10
<b>Manganese</b>	<b>230</b>		0.53	0.077	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Nickel</b>	<b>9.5</b>		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Selenium</b>	<b>0.43</b>	J	0.53	0.31	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Silver</b>	<b>0.12</b>	J	0.27	0.068	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
Thallium	<0.26	F1	0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Vanadium</b>	<b>14</b>		0.27	0.063	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Zinc</b>	<b>57</b>	F1	1.1	0.47	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Potassium</b>	<b>790</b>	F1	27	9.4	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1
<b>Sodium</b>	<b>690</b>		53	7.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 21:38	1
<b>Barium</b>	<b>0.37</b>	J	0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 21:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 21:38	1
<b>Cadmium</b>	<b>0.0047</b>	J	0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 21:38	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (0-5)**

**Lab Sample ID: 500-146393-2**

Date Collected: 06/04/18 10:45  
Date Received: 06/04/18 18:10

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	410		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 21:38	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Cobalt	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Copper	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Iron	<0.20		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 21:38	1
Lead	0.011		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 21:38	1
Magnesium	120		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:38	1
Manganese	0.90		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Nickel	0.039	B	0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Potassium	2.4 J		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:38	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 21:38	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:38	1
Zinc	0.072	J	0.50	0.020	mg/L		06/11/18 09:40	06/11/18 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.23		0.0075	0.0075	mg/L		06/12/18 07:24	06/12/18 18:47	1
Manganese	0.39		0.025	0.010	mg/L		06/12/18 07:24	06/12/18 18:47	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		06/11/18 09:40	06/12/18 01:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 01:25	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		06/11/18 13:25	06/12/18 12:24	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.017	0.0058	mg/Kg	✉	06/07/18 16:37	06/12/18 16:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.54	0.19	mg/Kg	✉	06/15/18 11:00	06/15/18 14:57	1
pH	8.9		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (5-8)**

Date Collected: 06/04/18 10:50

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-3**

Matrix: Solid

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.022		0.014	0.0063	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Benzene	<0.00037		0.0014	0.00037	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Bromodichloromethane	<0.00029		0.0014	0.00029	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Bromoform	<0.00042		0.0014	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Bromomethane	<0.0014 *		0.0036	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
2-Butanone (MEK)	<0.0016		0.0036	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Carbon disulfide	<0.00075		0.0036	0.00075	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Carbon tetrachloride	<0.00042		0.0014	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Chlorobenzene	<0.00053		0.0014	0.00053	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Chloroethane	<0.0011 *		0.0036	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Chloroform	<0.00050		0.0014	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Chloromethane	<0.0015 *		0.0036	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
cis-1,2-Dichloroethene	<0.00040		0.0014	0.00040	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
cis-1,3-Dichloropropene	<0.00044		0.0014	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Dibromochloromethane	<0.00047		0.0014	0.00047	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,1-Dichloroethane	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,2-Dichloroethane	<0.0011		0.0036	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,1-Dichloroethene	<0.00050		0.0014	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,2-Dichloropropane	<0.00037		0.0014	0.00037	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,3-Dichloropropene, Total	<0.00051		0.0014	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Ethylbenzene	<0.00069		0.0014	0.00069	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
2-Hexanone	<0.0011 *		0.0036	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Methylene Chloride	<0.0014		0.0036	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
4-Methyl-2-pentanone (MIBK)	<0.0011 *		0.0036	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Methyl tert-butyl ether	<0.00042		0.0014	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Styrene	<0.00044		0.0014	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,1,2,2-Tetrachloroethane	<0.00046 *		0.0014	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Tetrachloroethene	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Toluene	<0.00036		0.0014	0.00036	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
trans-1,2-Dichloroethene	<0.00064		0.0014	0.00064	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
trans-1,3-Dichloropropene	<0.00051		0.0014	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,1,1-Trichloroethane	<0.00048		0.0014	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
1,1,2-Trichloroethane	<0.00062		0.0014	0.00062	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Trichloroethene	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Vinyl acetate	<0.0013		0.0036	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Vinyl chloride	<0.00064 *		0.0014	0.00064	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1
Xylenes, Total	<0.00046		0.0029	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 04:47	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 131	06/05/18 11:24	06/13/18 04:47	1
Dibromofluoromethane	82		75 - 126	06/05/18 11:24	06/13/18 04:47	1
1,2-Dichloroethane-d4 (Surr)	84		70 - 134	06/05/18 11:24	06/13/18 04:47	1
Toluene-d8 (Surr)	100		75 - 124	06/05/18 11:24	06/13/18 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0066		0.036	0.0066	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Acenaphthylene	<0.0048		0.036	0.0048	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Anthracene	<0.0061		0.036	0.0061	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Benzo[a]anthracene	<0.0049		0.036	0.0049	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (5-8)**

**Lab Sample ID: 500-146393-3**

**Date Collected: 06/04/18 10:50**

**Matrix: Solid**

**Date Received: 06/04/18 18:10**

**Percent Solids: 85.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.0071		0.036	0.0071	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Benzo[b]fluoranthene	<0.0079		0.036	0.0079	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Benzo[g,h,i]perylene	<0.012		0.036	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Benzo[k]fluoranthene	<0.011		0.036	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Bis(2-chloroethoxy)methane	<0.037		0.18	0.037	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Bis(2-chloroethyl)ether	<0.055		0.18	0.055	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Bis(2-ethylhexyl) phthalate	<0.067		0.18	0.067	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4-Bromophenyl phenyl ether	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Butyl benzyl phthalate	<0.070		0.18	0.070	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Carbazole	<0.091		0.18	0.091	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4-Chloroaniline	<0.17		0.74	0.17	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4-Chloro-3-methylphenol	<0.12		0.36	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Chloronaphthalene	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Chlorophenol	<0.062		0.18	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4-Chlorophenyl phenyl ether	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
<b>Chrysene</b>	<b>0.010 J</b>		0.036	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Dibenz(a,h)anthracene	<0.0071		0.036	0.0071	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Dibenzofuran	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
1,2-Dichlorobenzene	<0.044		0.18	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
1,3-Dichlorobenzene	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
1,4-Dichlorobenzene	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
3,3'-Dichlorobenzidine	<0.051		0.18	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4-Dichlorophenol	<0.087		0.36	0.087	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Diethyl phthalate	<0.062		0.18	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4-Dimethylphenol	<0.14		0.36	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Dimethyl phthalate	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Di-n-butyl phthalate	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4,6-Dinitro-2-methylphenol	<0.29		0.74	0.29	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4-Dinitrophenol	<0.64		0.74	0.64	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4-Dinitrotoluene	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,6-Dinitrotoluene	<0.072		0.18	0.072	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Di-n-octyl phthalate	<0.060		0.18	0.060	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Fluoranthene	<0.0068		0.036	0.0068	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Fluorene	<0.0051		0.036	0.0051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Hexachlorobenzene	<0.0085		0.074	0.0085	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Hexachlorobutadiene	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Hexachlorocyclopentadiene	<0.21		0.74	0.21	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Hexachloroethane	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Indeno[1,2,3-cd]pyrene	<0.0095		0.036	0.0095	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Isophorone	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Methylnaphthalene	<0.0067		0.074	0.0067	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Methylphenol	<0.059		0.18	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
3 & 4 Methylphenol	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Naphthalene	<0.0056		0.036	0.0056	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Nitroaniline	<0.049		0.18	0.049	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
3-Nitroaniline	<0.11		0.36	0.11	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
4-Nitroaniline	<0.15		0.36	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Nitrobenzene	<0.0091		0.036	0.0091	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2-Nitrophenol	<0.086		0.36	0.086	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (5-8)**

**Lab Sample ID: 500-146393-3**

Date Collected: 06/04/18 10:50

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.35		0.74	0.35	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
N-Nitrosodi-n-propylamine	<0.045		0.074	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
N-Nitrosodiphenylamine	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,2'-oxybis[1-chloropropane]	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Pentachlorophenol	<0.59		0.74	0.59	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Phenanthrene	<0.0051		0.036	0.0051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
Phenol	<0.081		0.18	0.081	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
<b>Pyrene</b>	<b>0.013 J</b>		0.036	0.0073	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
1,2,4-Trichlorobenzene	<0.039		0.18	0.039	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4,5-Trichlorophenol	<0.084		0.36	0.084	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	1
2,4,6-Trichlorophenol	<0.13		0.36	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:21	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	93			44 - 121			06/07/18 07:15	06/11/18 11:21	1
2-Fluorophenol	121			46 - 133			06/07/18 07:15	06/11/18 11:21	1
Nitrobenzene-d5	92			41 - 120			06/07/18 07:15	06/11/18 11:21	1
Phenol-d5	112			46 - 125			06/07/18 07:15	06/11/18 11:21	1
Terphenyl-d14	109			35 - 160			06/07/18 07:15	06/11/18 11:21	1
2,4,6-Tribromophenol	68			25 - 139			06/07/18 07:15	06/11/18 11:21	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
<b>Arsenic</b>	<b>5.1</b>		0.56	0.19	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Barium	27		0.56	0.064	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Beryllium	0.66		0.22	0.052	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Cadmium	0.23 B		0.11	0.020	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Chromium	14		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Cobalt	9.5		0.28	0.073	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Copper	25		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Iron	17000		11	5.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Lead	14		0.28	0.13	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Magnesium	31000		5.6	2.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Calcium	80000 B		110	19	mg/Kg	⊗	06/07/18 17:05	06/11/18 23:55	10
Manganese	350		0.56	0.081	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Nickel	30		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Selenium	0.88		0.56	0.33	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Silver	0.19 J		0.28	0.072	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Thallium	0.38 J		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Vanadium	16		0.28	0.066	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Zinc	56		1.1	0.49	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Potassium	2200		28	9.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1
Sodium	270		56	8.3	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 21:42	1
Barium	0.42 J		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 21:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 21:42	1
Cadmium	0.0044 J		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 21:42	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B09 (5-8)**

**Lab Sample ID: 500-146393-3**

Date Collected: 06/04/18 10:50

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	490		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 21:42	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Cobalt	0.016 J		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Copper	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Iron	<0.20		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 21:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 21:42	1
Magnesium	120		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:42	1
Manganese	2.6		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Nickel	0.023 J B		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Potassium	2.7		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:42	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 21:42	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:42	1
Zinc	<0.020		0.50	0.020	mg/L		06/11/18 09:40	06/11/18 21:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.20		0.025	0.010	mg/L		06/12/18 07:24	06/12/18 18:51	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		06/11/18 09:40	06/12/18 01:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 01:29	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		06/11/18 13:25	06/12/18 12:25	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017 J		0.018	0.0059	mg/Kg		06/07/18 16:37	06/12/18 15:26	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.52	0.18	mg/Kg		06/15/18 11:00	06/15/18 14:57	1
pH	8.4		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5)**

Date Collected: 06/04/18 11:35

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-4**

Matrix: Solid

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0073		0.017	0.0073	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Chlorobenzene	<0.00062		0.0017	0.00062	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Chloromethane	<0.0017 *		0.0042	0.0017	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
2-Hexanone	<0.0013 *		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
4-Methyl-2-pentanone (MIBK)	<0.0012 *		0.0042	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,1,2,2-Tetrachloroethane	<0.00053 *		0.0017	0.00053	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
1,1,2-Trichloroethane	<0.00072		0.0017	0.00072	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Vinyl chloride	<0.00074 *		0.0017	0.00074	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		75 - 131	06/05/18 11:24	06/13/18 05:17	1
Dibromofluoromethane	83		75 - 126	06/05/18 11:24	06/13/18 05:17	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 134	06/05/18 11:24	06/13/18 05:17	1
Toluene-d8 (Surr)	99		75 - 124	06/05/18 11:24	06/13/18 05:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0070		0.039	0.0070	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Acenaphthylene	<0.0051		0.039	0.0051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Anthracene	<0.0065		0.039	0.0065	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Benzo[a]anthracene	0.018 J		0.039	0.0053	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5)**

**Lab Sample ID: 500-146393-4**

Date Collected: 06/04/18 11:35

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<b>0.018</b>	J	0.039	0.0076	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Benzo[b]fluoranthene	<0.0084		0.039	0.0084	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Benzo[g,h,i]perylene	<b>0.013</b>	J	0.039	0.013	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Benzo[k]fluoranthene	<0.012		0.039	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Bis(2-chloroethoxy)methane	<0.040		0.20	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Bis(2-chloroethyl)ether	<0.059		0.20	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Bis(2-ethylhexyl) phthalate	<0.071		0.20	0.071	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4-Bromophenyl phenyl ether	<0.051		0.20	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Butyl benzyl phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Carbazole	<0.098		0.20	0.098	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4-Chloroaniline	<0.18		0.79	0.18	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4-Chloro-3-methylphenol	<0.13		0.39	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Chloronaphthalene	<0.043		0.20	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Chlorophenol	<0.067		0.20	0.067	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4-Chlorophenyl phenyl ether	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Chrysene	<b>0.019</b>	J	0.039	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Dibenz(a,h)anthracene	<0.0075		0.039	0.0075	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Dibenzofuran	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
1,2-Dichlorobenzene	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
1,3-Dichlorobenzene	<0.044		0.20	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
1,4-Dichlorobenzene	<0.050		0.20	0.050	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
3,3'-Dichlorobenzidine	<0.055		0.20	0.055	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4-Dichlorophenol	<0.093		0.39	0.093	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Diethyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4-Dimethylphenol	<0.15		0.39	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Dimethyl phthalate	<0.051		0.20	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Di-n-butyl phthalate	<0.059		0.20	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4,6-Dinitro-2-methylphenol	<0.31		0.79	0.31	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4-Dinitrophenol	<0.69		0.79	0.69	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4-Dinitrotoluene	<0.062		0.20	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,6-Dinitrotoluene	<0.077		0.20	0.077	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Di-n-octyl phthalate	<0.064		0.20	0.064	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Fluoranthene	<b>0.027</b>	J	0.039	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Fluorene	<0.0055		0.039	0.0055	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Hexachlorobenzene	<0.0091		0.079	0.0091	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Hexachlorobutadiene	<0.061		0.20	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Hexachlorocyclopentadiene	<0.22		0.79	0.22	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Hexachloroethane	<0.059		0.20	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Indeno[1,2,3-cd]pyrene	<b>0.011</b>	J	0.039	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Isophorone	<0.044		0.20	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Methylnaphthalene	<0.0072		0.079	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Methylphenol	<0.063		0.20	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
3 & 4 Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Naphthalene	<0.0060		0.039	0.0060	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Nitroaniline	<0.053		0.20	0.053	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
3-Nitroaniline	<0.12		0.39	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
4-Nitroaniline	<0.16		0.39	0.16	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Nitrobenzene	<0.0097		0.039	0.0097	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2-Nitrophenol	<0.092		0.39	0.092	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5)**

**Lab Sample ID: 500-146393-4**

Date Collected: 06/04/18 11:35  
Date Received: 06/04/18 18:10

Matrix: Solid

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.37		0.79	0.37	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
N-Nitrosodi-n-propylamine	<0.048		0.079	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
N-Nitrosodiphenylamine	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,2'-oxybis[1-chloropropane]	<0.045		0.20	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Pentachlorophenol	<0.63		0.79	0.63	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
<b>Phenanthrene</b>	<b>0.012 J</b>		0.039	0.0054	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
Phenol	<0.087		0.20	0.087	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
<b>Pyrene</b>	<b>0.029 J</b>		0.039	0.0078	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
1,2,4-Trichlorobenzene	<0.042		0.20	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4,5-Trichlorophenol	<0.089		0.39	0.089	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	1
2,4,6-Trichlorophenol	<0.13		0.39	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 11:49	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				06/07/18 07:15	06/11/18 11:49	1
2-Fluorophenol	121		46 - 133				06/07/18 07:15	06/11/18 11:49	1
Nitrobenzene-d5	94		41 - 120				06/07/18 07:15	06/11/18 11:49	1
Phenol-d5	110		46 - 125				06/07/18 07:15	06/11/18 11:49	1
Terphenyl-d14	112		35 - 160				06/07/18 07:15	06/11/18 11:49	1
2,4,6-Tribromophenol	82		25 - 139				06/07/18 07:15	06/11/18 11:49	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
<b>Arsenic</b>	<b>6.6</b>		0.56	0.19	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Barium	52		0.56	0.064	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Beryllium	0.63		0.23	0.053	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Cadmium	0.22 B		0.11	0.020	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Chromium	14		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Cobalt	7.4		0.28	0.074	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Copper	16		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Iron	15000		11	5.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Lead	28		0.28	0.13	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Magnesium	3400		5.6	2.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Calcium	3700 B		11	1.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Manganese	220		0.56	0.082	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Nickel	20		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Selenium	1.1		0.56	0.33	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Silver	0.25 J		0.28	0.073	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Thallium	<0.28		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Vanadium	20		0.28	0.066	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Zinc	57		1.1	0.49	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Potassium	1000		28	10	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1
Sodium	100		56	8.3	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	06/11/18 09:40	06/11/18 21:47		1
<b>Barium</b>	<b>0.18 J</b>		0.50	0.050	mg/L	06/11/18 09:40	06/11/18 21:47		1
Beryllium	<0.0040		0.0040	0.0040	mg/L	06/11/18 09:40	06/11/18 21:47		1
Cadmium	<0.0020		0.0050	0.0020	mg/L	06/11/18 09:40	06/11/18 21:47		1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5)**

**Lab Sample ID: 500-146393-4**

Date Collected: 06/04/18 11:35

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	74		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 21:47	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Cobalt	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Copper	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Iron	0.52		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 21:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 21:47	1
Magnesium	22		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:47	1
Manganese	0.061		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Nickel	0.018 J B		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Potassium	1.3 J		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:47	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 21:47	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:47	1
Zinc	<0.020		0.50	0.020	mg/L		06/11/18 09:40	06/11/18 21:47	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		06/11/18 09:40	06/12/18 01:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 01:33	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		06/11/18 13:25	06/12/18 12:27	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.019	0.0063	mg/Kg	⊗	06/07/18 16:37	06/12/18 15:28	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.51	0.18	mg/Kg	⊗	06/15/18 11:00	06/15/18 14:57	1
pH	7.8		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) Dup**

Date Collected: 06/04/18 11:40

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-5**

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0074		0.017	0.0074	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Carbon disulfide	<0.00088		0.0042	0.00088	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Carbon tetrachloride	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Chlorobenzene	<0.00063		0.0017	0.00063	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Chloroethane	<0.0013 *		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Chloroform	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Chloromethane	<0.0017 *		0.0042	0.0017	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
cis-1,3-Dichloropropene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,1-Dichloroethane	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,1-Dichloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,2-Dichloropropane	<0.00044		0.0017	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Ethylbenzene	<0.00081		0.0017	0.00081	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
2-Hexanone	<0.0013 *		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Methylene Chloride	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
4-Methyl-2-pentanone (MIBK)	<0.0013 *		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Methyl tert-butyl ether	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Styrene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,1,2,2-Tetrachloroethane	<0.00054 *		0.0017	0.00054	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Tetrachloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Toluene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
trans-1,2-Dichloroethene	<0.00075		0.0017	0.00075	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,1,1-Trichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
1,1,2-Trichloroethane	<0.00073		0.0017	0.00073	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Trichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Vinyl chloride	<0.00075 *		0.0017	0.00075	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1
Xylenes, Total	<0.00054		0.0034	0.00054	mg/Kg	⊗	06/05/18 11:24	06/13/18 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131			
Dibromofluoromethane	80		75 - 126			
1,2-Dichloroethane-d4 (Surr)	80		70 - 134			
Toluene-d8 (Surr)	99		75 - 124			
				06/05/18 11:24	06/13/18 05:46	1
				06/05/18 11:24	06/13/18 05:46	1
				06/05/18 11:24	06/13/18 05:46	1
				06/05/18 11:24	06/13/18 05:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Benzo[a]anthracene	0.028 J		0.040	0.0054	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) Dup**

**Lab Sample ID: 500-146393-5**

Date Collected: 06/04/18 11:40

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.035	J	0.040	0.0078	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Benzo[b]fluoranthene	0.041		0.040	0.0087	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Benzo[g,h,i]perylene	0.018	J	0.040	0.013	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Benzo[k]fluoranthene	0.012	J	0.040	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Carbazole	0.12	J	0.20	0.10	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Chlorophenol	<0.069		0.20	0.069	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Chrysene	0.033	J	0.040	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Dibenz(a,h)anthracene	<0.0078		0.040	0.0078	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
1,4-Dichlorobenzene	<0.052		0.20	0.052	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
3,3'-Dichlorobenzidine	<0.056		0.20	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4-Dinitrophenol	<0.71		0.81	0.71	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4-Dinitrotoluene	<0.064		0.20	0.064	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Di-n-octyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Fluoranthene	0.048		0.040	0.0075	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Indeno[1,2,3-cd]pyrene	0.017	J	0.040	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Methylnaphthalene	<0.0074		0.081	0.0074	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Naphthalene	<0.0062		0.040	0.0062	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2-Nitrophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) Dup**

**Lab Sample ID: 500-146393-5**

Date Collected: 06/04/18 11:40  
Date Received: 06/04/18 18:10

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,2'-oxybis[1-chloropropane]	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Pentachlorophenol	<0.64		0.81	0.64	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
<b>Phenanthrene</b>	<b>0.021 J</b>		0.040	0.0056	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
<b>Pyrene</b>	<b>0.049</b>		0.040	0.0080	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4,5-Trichlorophenol	<0.092		0.40	0.092	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 14:36	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	97			44 - 121			06/07/18 07:15	06/11/18 14:36	1
2-Fluorophenol	122			46 - 133			06/07/18 07:15	06/11/18 14:36	1
Nitrobenzene-d5	93			41 - 120			06/07/18 07:15	06/11/18 14:36	1
Phenol-d5	111			46 - 125			06/07/18 07:15	06/11/18 14:36	1
Terphenyl-d14	104			35 - 160			06/07/18 07:15	06/11/18 14:36	1
2,4,6-Tribromophenol	80			25 - 139			06/07/18 07:15	06/11/18 14:36	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
<b>Arsenic</b>	<b>6.9</b>		0.57	0.19	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Barium	74		0.57	0.065	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Beryllium	0.72		0.23	0.053	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Cadmium	0.28 B		0.11	0.020	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Chromium	16		0.57	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Cobalt	12		0.28	0.074	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Copper	18		0.57	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Iron	18000		11	5.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Lead	25		0.28	0.13	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Magnesium	4100		5.7	2.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Calcium	3800 B		11	1.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Manganese	530		0.57	0.082	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Nickel	29		0.57	0.17	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Selenium	1.3		0.57	0.33	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Silver	0.29		0.28	0.073	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Thallium	<0.28		0.57	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Vanadium	23		0.28	0.067	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Zinc	66		1.1	0.50	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Potassium	1200		28	10	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1
Sodium	110		57	8.4	mg/Kg	⊗	06/07/18 17:05	06/09/18 00:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 21:51	1
Barium	0.19 J		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 21:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 21:51	1
Cadmium	0.0020 J		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 21:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (0-5) Dup**

**Lab Sample ID: 500-146393-5**

Date Collected: 06/04/18 11:40

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 21:51	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Cobalt	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Copper	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Iron	0.63		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 21:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 21:51	1
Magnesium	24		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:51	1
Manganese	0.067		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Nickel	0.033	B	0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Potassium	1.4 J		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 21:51	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 21:51	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 21:51	1
Zinc	<0.020		0.50	0.020	mg/L		06/11/18 09:40	06/11/18 21:51	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		06/11/18 09:40	06/12/18 01:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 01:37	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		06/11/18 13:25	06/12/18 12:29	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.020	0.0065	mg/Kg	✉	06/07/18 16:37	06/12/18 15:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.53	0.18	mg/Kg	✉	06/15/18 11:00	06/15/18 14:58	1
pH	7.5		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (5-8)**

Date Collected: 06/04/18 11:45

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-6**

Matrix: Solid

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.013	J	0.014	0.0061	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Benzene	<0.00036		0.0014	0.00036	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Bromodichloromethane	<0.00029		0.0014	0.00029	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Bromoform	<0.00041		0.0014	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Bromomethane	<0.0013 *		0.0035	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
2-Butanone (MEK)	<0.0016		0.0035	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Carbon disulfide	<0.00073		0.0035	0.00073	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Carbon tetrachloride	<0.00041		0.0014	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Chlorobenzene	<0.00052		0.0014	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Chloroethane	<0.0010 *		0.0035	0.0010	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Chloroform	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Chloromethane	<0.0014 *		0.0035	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
cis-1,2-Dichloroethene	<0.00039		0.0014	0.00039	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
cis-1,3-Dichloropropene	<0.00042		0.0014	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Dibromochloromethane	<0.00046		0.0014	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,1-Dichloroethane	<0.00048		0.0014	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,2-Dichloroethane	<0.0011		0.0035	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,1-Dichloroethene	<0.00048		0.0014	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,2-Dichloropropane	<0.00036		0.0014	0.00036	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,3-Dichloropropene, Total	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Ethylbenzene	<0.00067		0.0014	0.00067	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
2-Hexanone	<0.0011 *		0.0035	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Methylene Chloride	<0.0014		0.0035	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
4-Methyl-2-pentanone (MIBK)	<0.0010 *		0.0035	0.0010	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Methyl tert-butyl ether	<0.00041		0.0014	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Styrene	<0.00043		0.0014	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,1,2,2-Tetrachloroethane	<0.00045 *		0.0014	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Tetrachloroethene	<0.00048		0.0014	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Toluene	<0.00036		0.0014	0.00036	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
trans-1,2-Dichloroethene	<0.00062		0.0014	0.00062	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
trans-1,3-Dichloropropene	<0.00049		0.0014	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,1,1-Trichloroethane	<0.00047		0.0014	0.00047	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
1,1,2-Trichloroethane	<0.00060		0.0014	0.00060	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Trichloroethene	<0.00048		0.0014	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Vinyl acetate	<0.0012		0.0035	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Vinyl chloride	<0.00062 *		0.0014	0.00062	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1
Xylenes, Total	<0.00045		0.0028	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 06:15	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		75 - 131	06/05/18 11:24	06/13/18 06:15	1
Dibromofluoromethane	81		75 - 126	06/05/18 11:24	06/13/18 06:15	1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	06/05/18 11:24	06/13/18 06:15	1
Toluene-d8 (Surr)	102		75 - 124	06/05/18 11:24	06/13/18 06:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0064		0.036	0.0064	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Acenaphthylene	<0.0047		0.036	0.0047	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Anthracene	<0.0060		0.036	0.0060	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Benzo[a]anthracene	<0.0048		0.036	0.0048	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (5-8)**

**Lab Sample ID: 500-146393-6**

Date Collected: 06/04/18 11:45

Matrix: Solid

Date Received: 06/04/18 18:10

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	<0.0069		0.036	0.0069	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Benzo[b]fluoranthene	<0.0077		0.036	0.0077	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Benzo[g,h,i]perylene	<0.012		0.036	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Benzo[k]fluoranthene	<0.011		0.036	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Bis(2-chloroethoxy)methane	<0.037		0.18	0.037	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Bis(2-chloroethyl)ether	<0.054		0.18	0.054	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Bis(2-ethylhexyl) phthalate	<0.066		0.18	0.066	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4-Bromophenyl phenyl ether	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Butyl benzyl phthalate	<0.068		0.18	0.068	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Carbazole	<0.090		0.18	0.090	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4-Chloroaniline	<0.17		0.72	0.17	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4-Chloro-3-methylphenol	<0.12		0.36	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2-Chloronaphthalene	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2-Chlorophenol	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4-Chlorophenyl phenyl ether	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
<b>Chrysene</b>	<b>0.018 J</b>		0.036	0.0098	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Dibenz(a,h)anthracene	<0.0069		0.036	0.0069	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Dibenzofuran	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
1,2-Dichlorobenzene	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
1,3-Dichlorobenzene	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
1,4-Dichlorobenzene	<0.046		0.18	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
3,3'-Dichlorobenzidine	<0.050		0.18	0.050	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4-Dichlorophenol	<0.085		0.36	0.085	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Diethyl phthalate	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4-Dimethylphenol	<0.14		0.36	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Dimethyl phthalate	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Di-n-butyl phthalate	<0.055		0.18	0.055	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4,6-Dinitro-2-methylphenol	<0.29		0.72	0.29	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4-Dinitrophenol	<0.63		0.72	0.63	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4-Dinitrotoluene	<0.057		0.18	0.057	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,6-Dinitrotoluene	<0.070		0.18	0.070	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Di-n-octyl phthalate	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Fluoranthene	<0.0066		0.036	0.0066	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Fluorene	<0.0050		0.036	0.0050	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Hexachlorobenzene	<0.0083		0.072	0.0083	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Hexachlorobutadiene	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Hexachlorocyclopentadiene	<0.21		0.72	0.21	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Hexachloroethane	<0.054		0.18	0.054	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Indeno[1,2,3-cd]pyrene	<0.0093		0.036	0.0093	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Isophorone	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
<b>2-Methylnaphthalene</b>	<b>0.033 J</b>		0.072	0.0066	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2-Methylphenol	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
3 & 4 Methylphenol	<0.060		0.18	0.060	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Naphthalene	<0.0055		0.036	0.0055	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2-Nitroaniline	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
3-Nitroaniline	<0.11		0.36	0.11	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
4-Nitroaniline	<0.15		0.36	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Nitrobenzene	<0.0089		0.036	0.0089	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2-Nitrophenol	<0.085		0.36	0.085	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (5-8)**

**Lab Sample ID: 500-146393-6**

Date Collected: 06/04/18 11:45  
Date Received: 06/04/18 18:10

Matrix: Solid

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	<0.34		0.72	0.34	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
N-Nitrosodi-n-propylamine	<0.044		0.072	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
N-Nitrosodiphenylamine	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,2'-oxybis[1-chloropropane]	<0.042		0.18	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Pentachlorophenol	<0.58		0.72	0.58	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
<b>Phenanthrene</b>	<b>0.030 J</b>		0.036	0.0050	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Phenol	<0.080		0.18	0.080	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
Pyrene	<0.0071		0.036	0.0071	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
1,2,4-Trichlorobenzene	<0.039		0.18	0.039	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4,5-Trichlorophenol	<0.082		0.36	0.082	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1
2,4,6-Trichlorophenol	<0.12		0.36	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		44 - 121	06/07/18 07:15	06/11/18 15:04	1
2-Fluorophenol	123		46 - 133	06/07/18 07:15	06/11/18 15:04	1
Nitrobenzene-d5	94		41 - 120	06/07/18 07:15	06/11/18 15:04	1
Phenol-d5	114		46 - 125	06/07/18 07:15	06/11/18 15:04	1
Terphenyl-d14	108		35 - 160	06/07/18 07:15	06/11/18 15:04	1
2,4,6-Tribromophenol	68		25 - 139	06/07/18 07:15	06/11/18 15:04	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
<b>Arsenic</b>	<b>6.8</b>		0.56	0.19	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Barium	31		0.56	0.064	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Beryllium	0.58		0.22	0.052	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Cadmium	0.19 B		0.11	0.020	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Chromium	12		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Cobalt	11		0.28	0.074	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Copper	23		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Iron	16000		11	5.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Lead	21		0.28	0.13	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Magnesium	29000		5.6	2.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Calcium	80000 B		110	19	mg/Kg	⊗	06/07/18 17:05	06/11/18 23:59	10
Manganese	390		0.56	0.081	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Nickel	27		0.56	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Selenium	0.71		0.56	0.33	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Silver	0.18 J		0.28	0.072	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Thallium	<0.28		0.56	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Vanadium	14		0.28	0.066	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Zinc	40		1.1	0.49	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Potassium	2000		28	9.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1
Sodium	150		56	8.3	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 22:03	1
Barium	0.56		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 22:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 22:03	1
Cadmium	0.0022 J		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 22:03	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B08 (5-8)**

**Lab Sample ID: 500-146393-6**

Date Collected: 06/04/18 11:45

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	540		5.0	0.50	mg/L				1
Chromium	<0.010		0.025	0.010	mg/L				1
Cobalt	0.034		0.025	0.010	mg/L				1
Copper	0.014 J		0.025	0.010	mg/L				1
Iron	<0.20		0.40	0.20	mg/L				1
Lead	<0.0075		0.0075	0.0075	mg/L				1
Magnesium	42		2.5	0.50	mg/L				1
Manganese	3.3		0.025	0.010	mg/L				1
Nickel	0.062 B		0.025	0.010	mg/L				1
Potassium	4.6		2.5	0.50	mg/L				1
Selenium	<0.020		0.050	0.020	mg/L				1
Silver	<0.010		0.025	0.010	mg/L				1
Vanadium	<0.010		0.025	0.010	mg/L				1
Zinc	<0.020		0.50	0.020	mg/L				1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.066		0.025	0.010	mg/L				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				1
Thallium	<0.0020		0.0020	0.0020	mg/L				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				1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0058	mg/Kg				1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.16		0.48	0.16	mg/Kg				1
pH	7.9		0.20	0.20	SU				1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (0-5)**

**Lab Sample ID: 500-146393-7**

Date Collected: 06/04/18 14:20

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.012	J	0.016	0.0069	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Benzene	<0.00041		0.0016	0.00041	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Bromodichloromethane	<0.00032		0.0016	0.00032	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Bromoform	<0.00047		0.0016	0.00047	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Bromomethane	<0.0015 *		0.0040	0.0015	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
2-Butanone (MEK)	<0.0018		0.0040	0.0018	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Carbon disulfide	<0.00083		0.0040	0.00083	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Carbon tetrachloride	<0.00046		0.0016	0.00046	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Chlorobenzene	<0.00059		0.0016	0.00059	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Chloroethane	<0.0012 *		0.0040	0.0012	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Chloroform	<0.00055		0.0016	0.00055	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Chloromethane	<0.0016 *		0.0040	0.0016	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
cis-1,2-Dichloroethene	<0.00045		0.0016	0.00045	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
cis-1,3-Dichloropropene	<0.00048		0.0016	0.00048	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Dibromochloromethane	<0.00052		0.0016	0.00052	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,1-Dichloroethane	<0.00055		0.0016	0.00055	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,2-Dichloroethane	<0.0012		0.0040	0.0012	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,1-Dichloroethene	<0.00055		0.0016	0.00055	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,2-Dichloropropane	<0.00041		0.0016	0.00041	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,3-Dichloropropene, Total	<0.00056		0.0016	0.00056	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Ethylbenzene	<0.00076		0.0016	0.00076	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
2-Hexanone	<0.0012 *		0.0040	0.0012	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Methylene Chloride	<0.0016		0.0040	0.0016	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
4-Methyl-2-pentanone (MIBK)	<0.0012 *		0.0040	0.0012	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Methyl tert-butyl ether	<0.00047		0.0016	0.00047	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Styrene	<0.00048		0.0016	0.00048	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,1,2,2-Tetrachloroethane	<0.00051 *		0.0016	0.00051	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Tetrachloroethene	<0.00054		0.0016	0.00054	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Toluene	<0.00040		0.0016	0.00040	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
trans-1,2-Dichloroethene	<0.00071		0.0016	0.00071	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
trans-1,3-Dichloropropene	<0.00056		0.0016	0.00056	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,1,1-Trichloroethane	<0.00053		0.0016	0.00053	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
1,1,2-Trichloroethane	<0.00068		0.0016	0.00068	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Trichloroethene	<0.00054		0.0016	0.00054	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Vinyl acetate	<0.0014		0.0040	0.0014	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Vinyl chloride	<0.00071 *		0.0016	0.00071	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1
Xylenes, Total	<0.00051		0.0032	0.00051	mg/Kg	☀	06/05/18 11:24	06/13/18 06:44	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		75 - 131	06/05/18 11:24	06/13/18 06:44	1
Dibromofluoromethane	82		75 - 126	06/05/18 11:24	06/13/18 06:44	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	06/05/18 11:24	06/13/18 06:44	1
Toluene-d8 (Surr)	98		75 - 124	06/05/18 11:24	06/13/18 06:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0070		0.039	0.0070	mg/Kg	☀	06/07/18 07:15	06/11/18 12:17	1
Acenaphthylene	<0.0051		0.039	0.0051	mg/Kg	☀	06/07/18 07:15	06/11/18 12:17	1
Anthracene	<0.0065		0.039	0.0065	mg/Kg	☀	06/07/18 07:15	06/11/18 12:17	1
Benzo[a]anthracene	<0.0052		0.039	0.0052	mg/Kg	☀	06/07/18 07:15	06/11/18 12:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (0-5)**

**Lab Sample ID: 500-146393-7**

**Date Collected: 06/04/18 14:20**

**Matrix: Solid**

**Date Received: 06/04/18 18:10**

**Percent Solids: 82.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.0075		0.039	0.0075	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Benzo[b]fluoranthene	<0.0084		0.039	0.0084	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Benzo[g,h,i]perylene	<0.013		0.039	0.013	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Benzo[k]fluoranthene	<0.011		0.039	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Bis(2-chloroethoxy)methane	<0.040		0.20	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Bis(2-chloroethyl)ether	<0.058		0.20	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Bis(2-ethylhexyl) phthalate	<0.071		0.20	0.071	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4-Bromophenyl phenyl ether	<0.051		0.20	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Butyl benzyl phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Carbazole	<0.097		0.20	0.097	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4-Chloroaniline	<0.18		0.79	0.18	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4-Chloro-3-methylphenol	<0.13		0.39	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Chloronaphthalene	<0.043		0.20	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Chlorophenol	<0.067		0.20	0.067	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4-Chlorophenyl phenyl ether	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Chrysene	<0.011		0.039	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Dibenz(a,h)anthracene	<0.0075		0.039	0.0075	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Dibenzofuran	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
1,2-Dichlorobenzene	<0.047		0.20	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
1,3-Dichlorobenzene	<0.044		0.20	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
1,4-Dichlorobenzene	<0.050		0.20	0.050	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
3,3'-Dichlorobenzidine	<0.055		0.20	0.055	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4-Dichlorophenol	<0.093		0.39	0.093	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Diethyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4-Dimethylphenol	<0.15		0.39	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Dimethyl phthalate	<0.051		0.20	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Di-n-butyl phthalate	<0.059		0.20	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4,6-Dinitro-2-methylphenol	<0.31		0.79	0.31	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4-Dinitrophenol	<0.69		0.79	0.69	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4-Dinitrotoluene	<0.062		0.20	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,6-Dinitrotoluene	<0.077		0.20	0.077	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Di-n-octyl phthalate	<0.064		0.20	0.064	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Fluoranthene	<0.0072		0.039	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Fluorene	<0.0055		0.039	0.0055	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Hexachlorobenzene	<0.0090		0.079	0.0090	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Hexachlorobutadiene	<0.061		0.20	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Hexachlorocyclopentadiene	<0.22		0.79	0.22	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Hexachloroethane	<0.059		0.20	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Indeno[1,2,3-cd]pyrene	<0.010		0.039	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Isophorone	<0.044		0.20	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Methylnaphthalene	<0.0072		0.079	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Methylphenol	<0.063		0.20	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
3 & 4 Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Naphthalene	<0.0060		0.039	0.0060	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Nitroaniline	<0.052		0.20	0.052	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
3-Nitroaniline	<0.12		0.39	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
4-Nitroaniline	<0.16		0.39	0.16	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Nitrobenzene	<0.0097		0.039	0.0097	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2-Nitrophenol	<0.092		0.39	0.092	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (0-5)**

**Lab Sample ID: 500-146393-7**

Date Collected: 06/04/18 14:20

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.37		0.79	0.37	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
N-Nitrosodi-n-propylamine	<0.048		0.079	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
N-Nitrosodiphenylamine	<0.046		0.20	0.046	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,2'-oxybis[1-chloropropane]	<0.045		0.20	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Pentachlorophenol	<0.63		0.79	0.63	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Phenanthrene	<0.0054		0.039	0.0054	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Phenol	<0.087		0.20	0.087	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
Pyrene	<0.0077		0.039	0.0077	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
1,2,4-Trichlorobenzene	<0.042		0.20	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4,5-Trichlorophenol	<0.089		0.39	0.089	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	1
2,4,6-Trichlorophenol	<0.13		0.39	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:17	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			06/07/18 07:15	06/11/18 12:17	1
2-Fluorophenol		126		46 - 133			06/07/18 07:15	06/11/18 12:17	1
Nitrobenzene-d5		92		41 - 120			06/07/18 07:15	06/11/18 12:17	1
Phenol-d5		112		46 - 125			06/07/18 07:15	06/11/18 12:17	1
Terphenyl-d14		114		35 - 160			06/07/18 07:15	06/11/18 12:17	1
2,4,6-Tribromophenol		74		25 - 139			06/07/18 07:15	06/11/18 12:17	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Arsenic</b>	<b>4.0</b>		0.55	0.19	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Barium</b>	<b>52</b>		0.55	0.063	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Beryllium</b>	<b>0.64</b>		0.22	0.052	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Cadmium</b>	<b>0.14</b> B		0.11	0.020	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Chromium</b>	<b>15</b>		0.55	0.27	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Cobalt</b>	<b>7.1</b>		0.28	0.073	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Copper</b>	<b>17</b>		0.55	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Iron</b>	<b>18000</b>		11	5.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Lead</b>	<b>12</b>		0.28	0.13	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Magnesium</b>	<b>4200</b>		5.5	2.7	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Calcium</b>	<b>3600</b> B		11	1.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Manganese</b>	<b>190</b>		0.55	0.080	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Nickel</b>	<b>21</b>		0.55	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Selenium</b>	<b>0.97</b>		0.55	0.33	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Silver</b>	<b>0.23</b> J		0.28	0.071	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
Thallium	<0.28		0.55	0.28	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Vanadium</b>	<b>21</b>		0.28	0.065	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Zinc</b>	<b>54</b>		1.1	0.49	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Potassium</b>	<b>910</b>		28	9.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1
<b>Sodium</b>	<b>410</b>		55	8.2	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 22:07	1
<b>Barium</b>	<b>0.21</b> J		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 22:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 22:07	1
<b>Cadmium</b>	<b>0.0020</b> J		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 22:07	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (0-5)**

**Lab Sample ID: 500-146393-7**

Date Collected: 06/04/18 14:20

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100		5.0	0.50	mg/L				1
Chromium	<0.010		0.025	0.010	mg/L				1
Cobalt	<0.010		0.025	0.010	mg/L				1
Copper	<0.010		0.025	0.010	mg/L				1
Iron	0.23 J		0.40	0.20	mg/L				1
Lead	<0.0075		0.0075	0.0075	mg/L				1
Magnesium	43		2.5	0.50	mg/L				1
Manganese	0.21		0.025	0.010	mg/L				1
Nickel	0.020 J B		0.025	0.010	mg/L				1
Potassium	0.71 J		2.5	0.50	mg/L				1
Selenium	<0.020		0.050	0.020	mg/L				1
Silver	<0.010		0.025	0.010	mg/L				1
Vanadium	<0.010		0.025	0.010	mg/L				1
Zinc	<0.020		0.50	0.020	mg/L				1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.25		0.025	0.010	mg/L				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				1
Thallium	<0.0020		0.0020	0.0020	mg/L				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				1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0061	mg/Kg				1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.51	0.18	mg/Kg				1
pH	8.3		0.20	0.20	SU				1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (5-10)**

Date Collected: 06/04/18 14:25

Date Received: 06/04/18 18:10

**Lab Sample ID: 500-146393-8**

Matrix: Solid

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.011	J	0.013	0.0056	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Benzene	<0.00033		0.0013	0.00033	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Bromodichloromethane	<0.00026		0.0013	0.00026	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Bromoform	<0.00038		0.0013	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Bromomethane	<0.0012 *		0.0032	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
2-Butanone (MEK)	<0.0014		0.0032	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Carbon disulfide	<0.00067		0.0032	0.00067	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Carbon tetrachloride	<0.00038		0.0013	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Chlorobenzene	<0.00048		0.0013	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Chloroethane	<0.00096 *		0.0032	0.00096	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Chloroform	<0.00045		0.0013	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Chloromethane	<0.0013 *		0.0032	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
cis-1,2-Dichloroethene	<0.00036		0.0013	0.00036	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
cis-1,3-Dichloropropene	<0.00039		0.0013	0.00039	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Dibromochloromethane	<0.00042		0.0013	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,1-Dichloroethane	<0.00044		0.0013	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,2-Dichloroethane	<0.0010		0.0032	0.0010	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,1-Dichloroethene	<0.00045		0.0013	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,2-Dichloropropane	<0.00034		0.0013	0.00034	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,3-Dichloropropene, Total	<0.00046		0.0013	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Ethylbenzene	<0.00062		0.0013	0.00062	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
2-Hexanone	<0.0010 *		0.0032	0.0010	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Methylene Chloride	<0.0013		0.0032	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
4-Methyl-2-pentanone (MIBK)	<0.00096 *		0.0032	0.00096	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Methyl tert-butyl ether	<0.00038		0.0013	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Styrene	<0.00039		0.0013	0.00039	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,1,2,2-Tetrachloroethane	<0.00041 *		0.0013	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Tetrachloroethene	<0.00044		0.0013	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Toluene	<0.00033		0.0013	0.00033	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
trans-1,2-Dichloroethene	<0.00057		0.0013	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
trans-1,3-Dichloropropene	<0.00046		0.0013	0.00046	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,1,1-Trichloroethane	<0.00043		0.0013	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
1,1,2-Trichloroethane	<0.00056		0.0013	0.00056	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Trichloroethene	<0.00044		0.0013	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Vinyl acetate	<0.0011		0.0032	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Vinyl chloride	<0.00057 *		0.0013	0.00057	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1
Xylenes, Total	<0.00041		0.0026	0.00041	mg/Kg	⊗	06/05/18 11:24	06/13/18 07:13	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		75 - 131	06/05/18 11:24	06/13/18 07:13	1
Dibromofluoromethane	83		75 - 126	06/05/18 11:24	06/13/18 07:13	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	06/05/18 11:24	06/13/18 07:13	1
Toluene-d8 (Surr)	101		75 - 124	06/05/18 11:24	06/13/18 07:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0067		0.037	0.0067	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Acenaphthylene	<0.0049		0.037	0.0049	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Anthracene	<0.0062		0.037	0.0062	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Benzo[a]anthracene	<0.0050		0.037	0.0050	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (5-10)**

**Lab Sample ID: 500-146393-8**

Date Collected: 06/04/18 14:25  
Date Received: 06/04/18 18:10

Matrix: Solid

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	<0.0072		0.037	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Benzo[b]fluoranthene	<0.0080		0.037	0.0080	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Benzo[g,h,i]perylene	<0.012		0.037	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Benzo[k]fluoranthene	<0.011		0.037	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Bis(2-chloroethoxy)methane	<0.038		0.19	0.038	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Bis(2-chloroethyl)ether	<0.056		0.19	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Bis(2-ethylhexyl) phthalate	<0.068		0.19	0.068	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4-Bromophenyl phenyl ether	<0.049		0.19	0.049	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Butyl benzyl phthalate	<0.071		0.19	0.071	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Carbazole	<0.093		0.19	0.093	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4-Chloroaniline	<0.17		0.75	0.17	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4-Chloro-3-methylphenol	<0.13		0.37	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Chloronaphthalene	<0.041		0.19	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Chlorophenol	<0.063		0.19	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4-Chlorophenyl phenyl ether	<0.043		0.19	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Chrysene	<0.010		0.037	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Dibenz(a,h)anthracene	<0.0072		0.037	0.0072	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Dibenzofuran	<0.043		0.19	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
1,2-Dichlorobenzene	<0.044		0.19	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
1,3-Dichlorobenzene	<0.042		0.19	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
1,4-Dichlorobenzene	<0.048		0.19	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
3,3'-Dichlorobenzidine	<0.052		0.19	0.052	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4-Dichlorophenol	<0.088		0.37	0.088	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Diethyl phthalate	<0.063		0.19	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4-Dimethylphenol	<0.14		0.37	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Dimethyl phthalate	<0.048		0.19	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Di-n-butyl phthalate	<0.057		0.19	0.057	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4,6-Dinitro-2-methylphenol	<0.30		0.75	0.30	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4-Dinitrophenol	<0.65		0.75	0.65	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4-Dinitrotoluene	<0.059		0.19	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,6-Dinitrotoluene	<0.073		0.19	0.073	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Di-n-octyl phthalate	<0.061		0.19	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Fluoranthene	<0.0069		0.037	0.0069	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Fluorene	<0.0052		0.037	0.0052	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Hexachlorobenzene	<0.0086		0.075	0.0086	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Hexachlorobutadiene	<0.058		0.19	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Hexachlorocyclopentadiene	<0.21		0.75	0.21	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Hexachloroethane	<0.056		0.19	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Indeno[1,2,3-cd]pyrene	<0.0096		0.037	0.0096	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Isophorone	<0.042		0.19	0.042	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Methylnaphthalene	<0.0068		0.075	0.0068	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Methylphenol	<0.060		0.19	0.060	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
3 & 4 Methylphenol	<0.062		0.19	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Naphthalene	<0.0057		0.037	0.0057	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Nitroaniline	<0.050		0.19	0.050	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
3-Nitroaniline	<0.12		0.37	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
4-Nitroaniline	<0.16		0.37	0.16	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Nitrobenzene	<0.0093		0.037	0.0093	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2-Nitrophenol	<0.088		0.37	0.088	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (5-10)**

**Lab Sample ID: 500-146393-8**

Date Collected: 06/04/18 14:25  
Date Received: 06/04/18 18:10

Matrix: Solid

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	<0.35		0.75	0.35	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
N-Nitrosodi-n-propylamine	<0.045		0.075	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
N-Nitrosodiphenylamine	<0.044		0.19	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,2'-oxybis[1-chloropropane]	<0.043		0.19	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Pentachlorophenol	<0.60		0.75	0.60	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
<b>Phenanthrene</b>	<b>0.019 J</b>		0.037	0.0052	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Phenol	<0.082		0.19	0.082	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
Pyrene	<0.0074		0.037	0.0074	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
1,2,4-Trichlorobenzene	<0.040		0.19	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4,5-Trichlorophenol	<0.085		0.37	0.085	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	1
2,4,6-Trichlorophenol	<0.13		0.37	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 12:45	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	97		44 - 121				06/07/18 07:15	06/11/18 12:45	1
2-Fluorophenol	116		46 - 133				06/07/18 07:15	06/11/18 12:45	1
Nitrobenzene-d5	96		41 - 120				06/07/18 07:15	06/11/18 12:45	1
Phenol-d5	112		46 - 125				06/07/18 07:15	06/11/18 12:45	1
Terphenyl-d14	110		35 - 160				06/07/18 07:15	06/11/18 12:45	1
2,4,6-Tribromophenol	61		25 - 139				06/07/18 07:15	06/11/18 12:45	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.21		1.1	0.21	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
<b>Arsenic</b>	<b>5.7</b>		0.53	0.18	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Barium	32		0.53	0.060	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Beryllium	0.61		0.21	0.050	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Cadmium	0.19 B		0.11	0.019	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Chromium	13		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Cobalt	10		0.27	0.069	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Copper	24		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Iron	16000		11	5.5	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Lead	11		0.27	0.12	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Magnesium	28000		5.3	2.6	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Calcium	82000 B		110	18	mg/Kg	⊗	06/07/18 17:05	06/12/18 00:03	10
Manganese	380		0.53	0.077	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Nickel	27		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Selenium	0.91		0.53	0.31	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Silver	0.18 J		0.27	0.068	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Thallium	<0.26		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Vanadium	15		0.27	0.063	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Zinc	46		1.1	0.47	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Potassium	2200		27	9.4	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1
Sodium	140		53	7.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 22:11	1
<b>Barium</b>	<b>0.58</b>		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 22:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 22:11	1
Cadmium	<0.0020		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 22:11	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (5-10)**

**Lab Sample ID: 500-146393-8**

Date Collected: 06/04/18 14:25

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	570		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 22:11	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Cobalt	0.026		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Copper	0.014 J		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Iron	<0.20		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 22:11	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 22:11	1
Magnesium	45		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 22:11	1
Manganese	2.6		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Nickel	0.054 B		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Potassium	4.8		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 22:11	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 22:11	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:11	1
Zinc	<0.020		0.50	0.020	mg/L		06/11/18 09:40	06/11/18 22:11	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		06/12/18 07:24	06/12/18 19:11	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		06/11/18 09:40	06/12/18 01:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 01:49	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		06/11/18 13:25	06/12/18 12:33	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016 J		0.018	0.0060	mg/Kg	✉	06/07/18 16:37	06/12/18 15:35	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.16		0.46	0.16	mg/Kg	✉	06/15/18 11:00	06/15/18 14:59	1
pH	7.8		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (10-13)**

**Lab Sample ID: 500-146393-9**

Date Collected: 06/04/18 14:30

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.021	*	0.017	0.0074	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Bromomethane	<0.0016	*	0.0042	0.0016	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Carbon disulfide	<0.00088		0.0042	0.00088	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Carbon tetrachloride	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Chlorobenzene	<0.00062		0.0017	0.00062	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Chloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Chloroform	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
cis-1,3-Dichloropropene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,1-Dichloroethane	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,1-Dichloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,2-Dichloropropane	<0.00044		0.0017	0.00044	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Ethylbenzene	<0.00081		0.0017	0.00081	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Methylene Chloride	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
4-Methyl-2-pentanone (MIBK)	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Methyl tert-butyl ether	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Styrene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,1,2,2-Tetrachloroethane	<0.00054		0.0017	0.00054	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Tetrachloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Toluene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
trans-1,2-Dichloroethene	<0.00075		0.0017	0.00075	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,1,1-Trichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
1,1,2-Trichloroethane	<0.00073		0.0017	0.00073	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Trichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Vinyl chloride	<0.00075		0.0017	0.00075	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1
Xylenes, Total	<0.00054		0.0034	0.00054	mg/Kg	⊗	06/05/18 11:24	06/14/18 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		75 - 131			1
Dibromofluoromethane	85		75 - 126			1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134			1
Toluene-d8 (Surr)	101		75 - 124			1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0066		0.036	0.0066	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Acenaphthylene	<0.0048		0.036	0.0048	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Anthracene	<0.0061		0.036	0.0061	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Benzo[a]anthracene	<0.0049		0.036	0.0049	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (10-13)**

**Lab Sample ID: 500-146393-9**

**Date Collected: 06/04/18 14:30**

**Matrix: Solid**

**Date Received: 06/04/18 18:10**

**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	<0.0071		0.036	0.0071	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Benzo[b]fluoranthene	<0.0079		0.036	0.0079	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Benzo[g,h,i]perylene	<0.012		0.036	0.012	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Benzo[k]fluoranthene	<0.011		0.036	0.011	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Bis(2-chloroethoxy)methane	<0.037		0.18	0.037	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Bis(2-chloroethyl)ether	<0.055		0.18	0.055	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Bis(2-ethylhexyl) phthalate	<0.067		0.18	0.067	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4-Bromophenyl phenyl ether	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Butyl benzyl phthalate	<0.070		0.18	0.070	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Carbazole	<0.092		0.18	0.092	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4-Chloroaniline	<0.17		0.74	0.17	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4-Chloro-3-methylphenol	<0.12		0.36	0.12	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Chloronaphthalene	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Chlorophenol	<0.063		0.18	0.063	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4-Chlorophenyl phenyl ether	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Chrysene	<0.010		0.036	0.010	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Dibenz(a,h)anthracene	<0.0071		0.036	0.0071	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Dibenzofuran	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
1,2-Dichlorobenzene	<0.044		0.18	0.044	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
1,3-Dichlorobenzene	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
1,4-Dichlorobenzene	<0.047		0.18	0.047	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
3,3'-Dichlorobenzidine	<0.051		0.18	0.051	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4-Dichlorophenol	<0.087		0.36	0.087	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Diethyl phthalate	<0.062		0.18	0.062	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4-Dimethylphenol	<0.14		0.36	0.14	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Dimethyl phthalate	<0.048		0.18	0.048	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Di-n-butyl phthalate	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4,6-Dinitro-2-methylphenol	<0.29		0.74	0.29	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4-Dinitrophenol	<0.65		0.74	0.65	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4-Dinitrotoluene	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,6-Dinitrotoluene	<0.072		0.18	0.072	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Di-n-octyl phthalate	<0.060		0.18	0.060	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Fluoranthene	<0.0068		0.036	0.0068	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Fluorene	<0.0052		0.036	0.0052	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Hexachlorobenzene	<0.0085		0.074	0.0085	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Hexachlorobutadiene	<0.058		0.18	0.058	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Hexachlorocyclopentadiene	<0.21		0.74	0.21	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Hexachloroethane	<0.056		0.18	0.056	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Indeno[1,2,3-cd]pyrene	<0.0095		0.036	0.0095	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Isophorone	<0.041		0.18	0.041	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Methylnaphthalene	<0.0067		0.074	0.0067	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Methylphenol	<0.059		0.18	0.059	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
3 & 4 Methylphenol	<0.061		0.18	0.061	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Naphthalene	<0.0056		0.036	0.0056	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Nitroaniline	<0.049		0.18	0.049	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
3-Nitroaniline	<0.11		0.36	0.11	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
4-Nitroaniline	<0.15		0.36	0.15	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Nitrobenzene	<0.0092		0.036	0.0092	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2-Nitrophenol	<0.087		0.36	0.087	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (10-13)**

**Lab Sample ID: 500-146393-9**

Date Collected: 06/04/18 14:30

Matrix: Solid

Date Received: 06/04/18 18:10

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	<0.35		0.74	0.35	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
N-Nitrosodi-n-propylamine	<0.045		0.074	0.045	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
N-Nitrosodiphenylamine	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,2'-oxybis[1-chloropropane]	<0.043		0.18	0.043	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Pentachlorophenol	<0.59		0.74	0.59	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
<b>Phenanthrene</b>	<b>0.037</b>		0.036	0.0051	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
Phenol	<0.082		0.18	0.082	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
<b>Pyrene</b>	<b>0.010 J</b>		0.036	0.0073	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
1,2,4-Trichlorobenzene	<0.040		0.18	0.040	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4,5-Trichlorophenol	<0.084		0.36	0.084	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	1
2,4,6-Trichlorophenol	<0.13		0.36	0.13	mg/Kg	⊗	06/07/18 07:15	06/11/18 13:12	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	92		44 - 121				06/07/18 07:15	06/11/18 13:12	1
2-Fluorophenol	112		46 - 133				06/07/18 07:15	06/11/18 13:12	1
Nitrobenzene-d5	91		41 - 120				06/07/18 07:15	06/11/18 13:12	1
Phenol-d5	107		46 - 125				06/07/18 07:15	06/11/18 13:12	1
Terphenyl-d14	107		35 - 160				06/07/18 07:15	06/11/18 13:12	1
2,4,6-Tribromophenol	62		25 - 139				06/07/18 07:15	06/11/18 13:12	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.21		1.1	0.21	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
<b>Arsenic</b>	<b>6.1</b>		0.53	0.18	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Barium	26		0.53	0.060	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Beryllium	0.57		0.21	0.049	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Cadmium	0.19 B		0.11	0.019	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Chromium	11		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Cobalt	9.7		0.26	0.069	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Copper	24		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Iron	15000		11	5.5	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Lead	10		0.26	0.12	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Magnesium	41000		5.3	2.6	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Calcium	110000 B		110	18	mg/Kg	⊗	06/07/18 17:05	06/12/18 00:07	10
Manganese	430		0.53	0.077	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Nickel	24		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Selenium	1.1		0.53	0.31	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Silver	0.18 J		0.26	0.068	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Thallium	<0.26		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Vanadium	13		0.26	0.062	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Zinc	41		1.1	0.46	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Potassium	1900		26	9.4	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1
Sodium	210		53	7.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/11/18 09:40	06/11/18 22:15	1
Barium	0.54		0.50	0.050	mg/L	⊗	06/11/18 09:40	06/11/18 22:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/11/18 09:40	06/11/18 22:15	1
Cadmium	0.0021 J		0.0050	0.0020	mg/L	⊗	06/11/18 09:40	06/11/18 22:15	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B07 (10-13)**

**Lab Sample ID: 500-146393-9**

Date Collected: 06/04/18 14:30

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	540		5.0	0.50	mg/L				1
Chromium	<0.010		0.025	0.010	mg/L				1
Cobalt	0.030		0.025	0.010	mg/L				1
Copper	0.015 J		0.025	0.010	mg/L				1
Iron	<0.20		0.40	0.20	mg/L				1
Lead	<0.0075		0.0075	0.0075	mg/L				1
Magnesium	55		2.5	0.50	mg/L				1
Manganese	2.3		0.025	0.010	mg/L				1
Nickel	0.073 B		0.025	0.010	mg/L				1
Potassium	4.8		2.5	0.50	mg/L				1
Selenium	<0.020		0.050	0.020	mg/L				1
Silver	<0.010		0.025	0.010	mg/L				1
Vanadium	<0.010		0.025	0.010	mg/L				1
Zinc	<0.020		0.50	0.020	mg/L				1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.043		0.025	0.010	mg/L				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				1
Thallium	<0.0020		0.0020	0.0020	mg/L				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				1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.018	0.0060	mg/Kg				1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.52	0.18	mg/Kg				1
pH	8.0		0.20	0.20	SU				1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B06 (0-3)**

**Lab Sample ID: 500-146393-10**

Date Collected: 06/04/18 15:50

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	J	0.015	0.0065	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Benzene	<0.00038		0.0015	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Bromodichloromethane	<0.00030		0.0015	0.00030	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Bromoform	<0.00043		0.0015	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Bromomethane	<0.0014 *		0.0037	0.0014	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
2-Butanone (MEK)	<0.0016		0.0037	0.0016	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Carbon disulfide	<0.00077		0.0037	0.00077	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Carbon tetrachloride	<0.00043		0.0015	0.00043	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Chlorobenzene	<0.00055		0.0015	0.00055	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Chloroethane	<0.0011 *		0.0037	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Chloroform	<0.00052		0.0015	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Chloromethane	<0.0015 *		0.0037	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
cis-1,2-Dichloroethene	<0.00042		0.0015	0.00042	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
cis-1,3-Dichloropropene	<0.00045		0.0015	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Dibromochloromethane	<0.00049		0.0015	0.00049	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,1-Dichloroethane	<0.00051		0.0015	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,2-Dichloroethane	<0.0012		0.0037	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,1-Dichloroethene	<0.00051		0.0015	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,2-Dichloropropane	<0.00038		0.0015	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,3-Dichloropropene, Total	<0.00052		0.0015	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Ethylbenzene	<0.00071		0.0015	0.00071	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
2-Hexanone	<0.0012 *		0.0037	0.0012	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Methylene Chloride	<0.0015		0.0037	0.0015	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
4-Methyl-2-pentanone (MIBK)	<0.0011 *		0.0037	0.0011	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Methyl tert-butyl ether	<0.00044		0.0015	0.00044	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Styrene	<0.00045		0.0015	0.00045	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,1,2,2-Tetrachloroethane	<0.00047 *		0.0015	0.00047	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Tetrachloroethene	<0.00051		0.0015	0.00051	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Toluene	<0.00038		0.0015	0.00038	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
trans-1,2-Dichloroethene	<0.00066		0.0015	0.00066	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
trans-1,3-Dichloropropene	<0.00052		0.0015	0.00052	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,1,1-Trichloroethane	<0.00050		0.0015	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
1,1,2-Trichloroethane	<0.00064		0.0015	0.00064	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Trichloroethene	<0.00050		0.0015	0.00050	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Vinyl acetate	<0.0013		0.0037	0.0013	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Vinyl chloride	<0.00066 *		0.0015	0.00066	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1
Xylenes, Total	<0.00048		0.0030	0.00048	mg/Kg	⊗	06/05/18 11:24	06/13/18 08:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		75 - 131			
Dibromofluoromethane	83		75 - 126			
1,2-Dichloroethane-d4 (Surr)	85		70 - 134			
Toluene-d8 (Surr)	98		75 - 124			
				06/05/18 11:24	06/13/18 08:09	1
				06/05/18 11:24	06/13/18 08:09	1
				06/05/18 11:24	06/13/18 08:09	1
				06/05/18 11:24	06/13/18 08:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0090	J	0.037	0.0067	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Acenaphthylene	0.013	J	0.037	0.0049	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Anthracene	0.040		0.037	0.0062	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Benzo[a]anthracene	0.25		0.037	0.0050	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B06 (0-3)**

**Lab Sample ID: 500-146393-10**

Date Collected: 06/04/18 15:50

Matrix: Solid

Date Received: 06/04/18 18:10

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	0.27		0.037	0.0072	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Benzo[b]fluoranthene	0.39		0.037	0.0080	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Benzo[g,h,i]perylene	0.14		0.037	0.012	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Benzo[k]fluoranthene	0.16		0.037	0.011	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Bis(2-chloroethoxy)methane	<0.038		0.19	0.038	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Bis(2-chloroethyl)ether	<0.056		0.19	0.056	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Bis(2-ethylhexyl) phthalate	<0.068		0.19	0.068	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4-Bromophenyl phenyl ether	<0.049		0.19	0.049	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Butyl benzyl phthalate	<0.071		0.19	0.071	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Carbazole	0.14 J		0.19	0.093	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4-Chloroaniline	<0.18		0.75	0.18	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4-Chloro-3-methylphenol	<0.13		0.37	0.13	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Chloronaphthalene	<0.041		0.19	0.041	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Chlorophenol	<0.064		0.19	0.064	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4-Chlorophenyl phenyl ether	<0.044		0.19	0.044	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Chrysene	0.30		0.037	0.010	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Dibenz(a,h)anthracene	0.045		0.037	0.0072	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Dibenzofuran	<0.044		0.19	0.044	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
1,2-Dichlorobenzene	<0.045		0.19	0.045	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
1,3-Dichlorobenzene	<0.042		0.19	0.042	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
1,4-Dichlorobenzene	<0.048		0.19	0.048	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
3,3'-Dichlorobenzidine	<0.052		0.19	0.052	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4-Dichlorophenol	<0.089		0.37	0.089	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Diethyl phthalate	<0.063		0.19	0.063	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4-Dimethylphenol	<0.14		0.37	0.14	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Dimethyl phthalate	<0.049		0.19	0.049	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Di-n-butyl phthalate	<0.057		0.19	0.057	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4,6-Dinitro-2-methylphenol	<0.30		0.75	0.30	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4-Dinitrophenol	<0.66		0.75	0.66	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4-Dinitrotoluene	<0.059		0.19	0.059	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,6-Dinitrotoluene	<0.073		0.19	0.073	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Di-n-octyl phthalate	<0.061		0.19	0.061	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Fluoranthene	0.44		0.037	0.0069	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Fluorene	0.0091 J		0.037	0.0052	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Hexachlorobenzene	<0.0086		0.075	0.0086	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Hexachlorobutadiene	<0.059		0.19	0.059	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Hexachlorocyclopentadiene	<0.21		0.75	0.21	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Hexachloroethane	<0.057		0.19	0.057	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Indeno[1,2,3-cd]pyrene	0.14		0.037	0.0097	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Isophorone	<0.042		0.19	0.042	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Methylnaphthalene	0.011 J		0.075	0.0069	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Methylphenol	<0.060		0.19	0.060	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
3 & 4 Methylphenol	<0.062		0.19	0.062	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Naphthalene	<0.0057		0.037	0.0057	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Nitroaniline	<0.050		0.19	0.050	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
3-Nitroaniline	<0.12		0.37	0.12	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
4-Nitroaniline	<0.16		0.37	0.16	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Nitrobenzene	<0.0093		0.037	0.0093	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2-Nitrophenol	<0.088		0.37	0.088	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B06 (0-3)**

**Lab Sample ID: 500-146393-10**

Date Collected: 06/04/18 15:50

Matrix: Solid

Date Received: 06/04/18 18:10

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	<0.35		0.75	0.35	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
N-Nitrosodi-n-propylamine	<0.046		0.075	0.046	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
N-Nitrosodiphenylamine	<0.044		0.19	0.044	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,2'-oxybis[1-chloropropane]	<0.043		0.19	0.043	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Pentachlorophenol	<0.60		0.75	0.60	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
<b>Phenanthrene</b>	<b>0.16</b>		0.037	0.0052	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
Phenol	<0.083		0.19	0.083	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
<b>Pyrene</b>	<b>0.40</b>		0.037	0.0074	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
1,2,4-Trichlorobenzene	<0.040		0.19	0.040	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4,5-Trichlorophenol	<0.085		0.37	0.085	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	1
2,4,6-Trichlorophenol	<0.13		0.37	0.13	mg/Kg	⊗	06/07/18 07:15	06/12/18 11:08	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				06/07/18 07:15	06/12/18 11:08	1
2-Fluorophenol	111		46 - 133				06/07/18 07:15	06/12/18 11:08	1
Nitrobenzene-d5	91		41 - 120				06/07/18 07:15	06/12/18 11:08	1
Phenol-d5	105		46 - 125				06/07/18 07:15	06/12/18 11:08	1
Terphenyl-d14	105		35 - 160				06/07/18 07:15	06/12/18 11:08	1
2,4,6-Tribromophenol	82		25 - 139				06/07/18 07:15	06/12/18 11:08	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.21		1.1	0.21	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
<b>Arsenic</b>	<b>3.9</b>		0.53	0.18	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Barium	45		0.53	0.061	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Beryllium	0.51		0.21	0.050	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Cadmium	0.29	B	0.11	0.019	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Chromium	12		0.53	0.26	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Cobalt	5.6		0.27	0.070	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Copper	20		0.53	0.15	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Iron	12000		11	5.5	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Lead	160		0.27	0.12	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Magnesium	5700		5.3	2.6	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Calcium	8700	B	11	1.8	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Manganese	180		0.53	0.077	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Nickel	15		0.53	0.16	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Selenium	1.0		0.53	0.31	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Silver	0.17	J	0.27	0.069	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Thallium	<0.27		0.53	0.27	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Vanadium	15		0.27	0.063	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Zinc	62		1.1	0.47	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Potassium	830		27	9.4	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1
Sodium	820		53	7.9	mg/Kg	⊗	06/07/18 17:05	06/09/18 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	06/11/18 09:40	06/11/18 22:20		1
Barium	0.29	J	0.50	0.050	mg/L	06/11/18 09:40	06/11/18 22:20		1
Beryllium	<0.0040		0.0040	0.0040	mg/L	06/11/18 09:40	06/11/18 22:20		1
Cadmium	0.0037	J	0.0050	0.0020	mg/L	06/11/18 09:40	06/11/18 22:20		1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

**Client Sample ID: 2409V-1-B06 (0-3)**

**Lab Sample ID: 500-146393-10**

Date Collected: 06/04/18 15:50

Matrix: Solid

Date Received: 06/04/18 18:10

Percent Solids: 86.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180		5.0	0.50	mg/L		06/11/18 09:40	06/11/18 22:20	1
Chromium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Cobalt	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Copper	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Iron	<0.20		0.40	0.20	mg/L		06/11/18 09:40	06/11/18 22:20	1
Lead	0.064		0.0075	0.0075	mg/L		06/11/18 09:40	06/11/18 22:20	1
Magnesium	76		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 22:20	1
Manganese	0.62		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Nickel	0.016 J B		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Potassium	0.71 J		2.5	0.50	mg/L		06/11/18 09:40	06/11/18 22:20	1
Selenium	<0.020		0.050	0.020	mg/L		06/11/18 09:40	06/11/18 22:20	1
Silver	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Vanadium	<0.010		0.025	0.010	mg/L		06/11/18 09:40	06/11/18 22:20	1
Zinc	0.032 J		0.50	0.020	mg/L		06/11/18 09:40	06/11/18 22:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.45		0.0075	0.0075	mg/L		06/12/18 07:24	06/12/18 19:27	1
Manganese	0.55		0.025	0.010	mg/L		06/12/18 07:24	06/12/18 19:27	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		06/11/18 09:40	06/12/18 02:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/11/18 09:40	06/12/18 02:05	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		06/11/18 13:25	06/12/18 12:37	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.018	0.0060	mg/Kg	✉	06/07/18 16:37	06/12/18 15:43	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.18		0.52	0.18	mg/Kg	✉	06/15/18 11:00	06/15/18 15:01	1
pH	8.0		0.20	0.20	SU			06/11/18 16:52	1

TestAmerica Chicago

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
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.
*	RPD of the LCS and LCSD exceeds the control limits

### GC/MS Semi 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.
X	Surrogate is outside control limits

### Metals

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.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
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.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146393-1

## 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	04-30-19

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		Water	1,3-Dichloropropene, Total
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60466  
Phone: 708.534.5200 Fax: 708.534.



500-146393 COC

#### 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](#)

[Return to Client](#)

Disposal by Lab

### Proposal by Law

Archive for Months

Archive for \_\_\_\_\_ Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>Van Sitt</i>	Company Terrian	Date 6/04/18	Time 1610	Received By <i>TA</i>	Company TA	Date 6/4/18	Time 1610	Lab Courier <i>TA</i>
Relinquished By <i>TA</i>	Company Company	Date 6/4/18	Time 1810	Received By <i>Shimshet TA CRT</i>	Company TA CRT	Date 6/5/18	Time 0820	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key	Client Comments	Lab Comments:
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	<p style="text-align: center;"><i>No Aluminum</i></p> 

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

(optional)  
Report To: Matt Weiss  
Contact: Matt Weiss  
Company: Terracon  
Address: 192 Exchange Blvd  
Address: Glendale Heights, IL 60139  
Phone: 630-445-0160  
Fax:  
E-Mail: matt.weiss@terracon.com

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

## Chain of Custody Record

Lab Job #: 500-146393

Chain of Custody Number: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 43.28

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

Comments

Client	Project #	Preservative	Parameter	Other	None	None	None	None				
				Date	# of Containers	Matrix	Total	Thermal	Tech	SPLP	23 Trisodium	P4
Lab ID	MS/MSB	Sample ID	Sampling	Date	Time							
2	2409U-1-B09 (0.5)	6/04/18	1045	6	5	X	X	X	X	X	X	X
3	2409U-1-B09 (5.8)	6/04/18	1050	6	5	X	X	X	X	X	X	X
4	2409U-1-B08 (0.5)	6/04/18	1135	6	5	X	X	X	X	X	X	X
5	2409U-1-B08 (Duplicat)	6/04/18	1140	6	5	X	X	X	X	X	X	X
6	2409U-1-B08 (5.8)	6/04/18	1145	6	5	X	X	X	X	X	X	X
7	2409U-1-B07 (0.5)	6/04/18	1420	6	5	X	X	X	X	X	X	X
8	2409U-1-B07 (5-10)	6/04/18	1425	6	5	X	X	X	X	X	X	X
9	2409U-1-B07 (10-13)	6/04/18	1430	6	5	X	X	X	X	X	X	X
10	2409U-1-B06 (0-3)	6/04/18	1550	6	5	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	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
<i>Ron Weisz Terracon</i>		6/4/18	1610	<i>John Scott TA-CHE</i>		6/4/18	1600	<i>TM</i>
<i>TM</i>		6/4/18	1810	<i>John Scott TA-CHE</i>		6/5/18	0820	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped

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 Aluminum

SPLP As directed by terracon

Lab Comments:

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-146393-1

**Login Number:** 146393

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	4.3,2.8
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Illinois Environmental Protection Agency

Page 1 of 2

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: FAU 1312-Golf Road at Harms Road Office Phone Number, if available: \_\_\_\_\_

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

Golf Road (Eastbound) IDOT STA 370+00 to 374+10 and 375+30 to 377+00 (ISGS Site 2409V-2)

City: Morton Grove State: IL Zip Code: 60077

County: Cook Township: Niles

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

Latitude: 42.05542 Longitude: -87.76638  
(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

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

### Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

Project Name: FAU 1312-Golf Road at Harms Road  
 Latitude: 42.05542 Longitude: -87.76638

### 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, B02, B03, B04, B06, and B07 were sampled adjacent to ISGS Site No 2409V-2. See Exhibits 2, 2B, 2C, and Table 4 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 J146450-1.

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: 135 Ambassador Drive

City: Naperville State: IL Zip Code: 60540

Phone: 630-717-4263

*Matt Weiss*

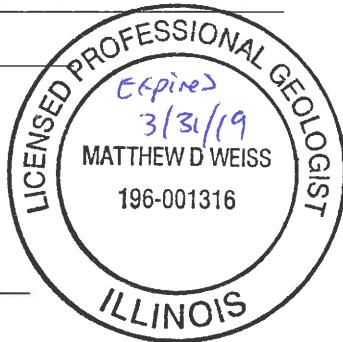
Printed Name:

*Matt Weiss*

8/3/18

Date:

Licensed Professional Engineer or  
Licensed Professional Geologist Signature:



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

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 1 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B01 (0-3)	2409V-2-B02 (0-3)	2409V-2-B03 (0-5)
				CCDD		(0-3)	(0-3)	(0-5)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018	06/05/2018	06/05/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		<0.0073	<0.0064	<0.0065
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		0.018	<0.0065	<0.0072
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0054	<0.0048	<0.0053
Anthracene	mg/kg	0.25	0.4	12000		0.04	<0.0060	<0.0067
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.15	<0.0049	<0.0054
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.13	<0.0070	<0.0078
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.19	<0.0078	<0.0086
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.046	<0.012	<0.013
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.065	<0.011	<0.012
Chrysene	mg/kg	1.2	2.7	88		0.15	<0.0098	<0.011
Dibenz(a,h)anthracene	mg/kg	0.2	0.42	0.09		0.016	<0.0070	<0.0077
Fluoranthene	mg/kg	2.7	4.1	3100		0.3	<0.0067	<0.0074
Fluorene	mg/kg	0.1	0.18	560		0.017	<0.0051	<0.0056
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.049	<0.0094	<0.010
Phenanthrene	mg/kg	1.3	2.5	210		0.17	<0.0050	<0.0056
Pyrene	mg/kg	1.9	3.0	2300		0.25	<0.0072	<0.0080
Carbazole	mg/kg	---	---	0.6		0.15	<0.090	<0.10
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		3.9	6.3	6.4
Barium	mg/kg	---	110	1500		68	80	73
Cadmium	mg/kg	---	0.6	5.2		0.39	0.46	0.31
Chromium, total	mg/kg	---	16.2	21		17	20	20
Lead	mg/kg	---	36	107		19	14	16
Mercury	mg/kg	---	0.06	0.89		0.054	0.029	0.03
Selenium	mg/kg	---	0.48	1.3		1.2	0.93	1.1
Silver	mg/kg	---	0.55	4.4		0.27	0.32	0.32
Antimony	mg/kg	---	4.0	5		<0.22	0.28	<0.23
Beryllium	mg/kg	---	0.59	22		0.71	0.76	0.83
Calcium	mg/kg	---	9,300	---		7200	2600	2700
Cobalt	mg/kg	---	8.9	20		11	15	12
Copper	mg/kg	---	19.6	2900		17	19	16
Cyanide	mg/kg	---	0.51	---		<0.18	<0.16	<0.19
Iron	mg/kg	---	15,900	15000		16000	17000	23000
Magnesium	mg/kg	---	4,820	325000		5600	3900	4300
Manganese	mg/kg	---	636	630		530	680	630
Nickel	mg/kg	---	18	100		23	33	31
Potassium	mg/kg	---	1,268	---		1800	1800	1900
Sodium	mg/kg	---	130	---		1600	530	610
Thallium	mg/kg	---	0.32	2.6		<0.28	<0.26	<0.30
Vanadium	mg/kg	---	25.2	550		25	30	33
Zinc	mg/kg	---	95	5100		71	70	73
pH			6.25	9		8.4	7.6	7.4

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 2 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B01 (0-3)	2409V-2-B02 (0-3)	2409V-2-B03 (0-5)
				CCDD		(0-3)	(0-3)	(0-5)
		Chicago	MSAs	pH 6.25-9.0	Date Collected	06/05/2018	06/05/2018	06/05/2018
<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	---	---	---		1.4	--	--
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	---	---	---		<0.010	<0.010	<0.010
Barium,TCLP	mg/L	---	---	---		0.33	0.16	0.14
Cadmium,TCLP	mg/L	---	---	---		0.0038	<0.0020	<0.0020
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		170	51	46
Cobalt,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Copper,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.27	0.48	0.36
Magnesium,TCLP	mg/L	---	---	---		68	11	11
Manganese,TCLP	mg/L	---	---	---		1.7	0.019	0.022
Nickel,TCLP	mg/L	---	---	---		0.016	<0.010	<0.010
Potassium,TCLP	mg/L	---	---	---		1.4	1.7	1.2
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Zinc,TCLP	mg/L	---	---	---		<0.020	0.049	<0.020

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 3 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B04 (0-5)	2409V-2-B06 (0-3)	2409V-2-B07 (0-5)
				CCDD		(0-5)	(0-3)	(0-5)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018	06/05/2018	06/05/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		<0.0071	<0.0064	0.012
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.0072	<0.0065	<0.0070
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0053	<0.0048	<0.0051
Anthracene	mg/kg	0.25	0.4	12000		<0.0067	<0.0061	0.02
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.028	0.0077	0.065
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.032	0.0093	0.066
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.036	<0.0078	0.071
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.013	<0.012	0.026
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.016	<0.011	0.029
Chrysene	mg/kg	1.2	2.7	88		0.028	<0.0099	0.062
Dibenz(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0077	<0.0070	<0.0075
Fluoranthene	mg/kg	2.7	4.1	3100		0.06	0.01	0.11
Fluorene	mg/kg	0.1	0.18	560		<0.0056	<0.0051	<0.0055
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.014	<0.0094	0.027
Phenanthrene	mg/kg	1.3	2.5	210		0.028	0.0054	0.065
Pyrene	mg/kg	1.9	3.0	2300		0.05	0.0095	0.097
Carbazole	mg/kg	---	---	0.6		0.12	<0.091	<0.097
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		6.2	3.7	5.4
Barium	mg/kg	---	110	1500		92	69	76
Cadmium	mg/kg	---	0.6	5.2		0.34	0.27	0.34
Chromium, total	mg/kg	---	16.2	21		21	16	16
Lead	mg/kg	---	36	107		17	15	34
Mercury	mg/kg	---	0.06	0.89		0.043	0.028	0.046
Selenium	mg/kg	---	0.48	1.3		1.3	0.81	1.2
Silver	mg/kg	---	0.55	4.4		0.34	0.29	0.32
Antimony	mg/kg	---	4.0	5		<0.23	<0.22	<0.22
Beryllium	mg/kg	---	0.59	22		0.8	0.63	0.76
Calcium	mg/kg	---	9,300	---		3100	2700	3700
Cobalt	mg/kg	---	8.9	20		15	12	9
Copper	mg/kg	---	19.6	2900		13	14	21
Cyanide	mg/kg	---	0.51	---		<0.20	<0.19	<0.18
Iron	mg/kg	---	15,900	15000		22000	15000	17000
Magnesium	mg/kg	---	4,820	325000		4400	3300	3600
Manganese	mg/kg	---	636	630		730	440	330
Nickel	mg/kg	---	18	100		26	23	24
Potassium	mg/kg	---	1,268	---		2100	1200	1300
Sodium	mg/kg	---	130	---		570	170	90
Thallium	mg/kg	---	0.32	2.6		<0.29	<0.28	<0.29
Vanadium	mg/kg	---	25.2	550		32	24	28
Zinc	mg/kg	---	95	5100		79	57	62
pH			6.25	9		7.4	7.7	7.2

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 4 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B04 (0-5)	2409V-2-B06 (0-3)	2409V-2-B07 (0-5)
				CCDD		(0-5)	(0-3)	(0-5)
		Chicago	MSAs	pH 6.25-9.0	Date Collected	06/05/2018	06/05/2018	06/05/2018
<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	---	---	---		--	--	0.032
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	---	---	---		<0.010	<0.010	<0.010
Barium,TCLP	mg/L	---	---	---		0.13	0.15	0.35
Cadmium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	0.0043
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	0.015
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		53	57	160
Cobalt,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Copper,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		0.31	0.27	<0.20
Magnesium,TCLP	mg/L	---	---	---		15	17	75
Manganese,TCLP	mg/L	---	---	---		0.017	0.015	0.93
Nickel,TCLP	mg/L	---	---	---		<0.010	<0.010	0.016
Potassium,TCLP	mg/L	---	---	---		0.73	0.52	0.92
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Zinc,TCLP	mg/L	---	---	---		0.13	0.074	0.021

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 5 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B07 (0-5) Dup	2409V-2-B07 (5-10)	2409V-2-B07 (10-15)
				CCDD		(0-5)	(5-10)	(10-15)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018	06/05/2018	06/05/2018
<b>Volatile Organic Analytical Parameters</b>								
Acetone	mg/kg	---	---	25		0.01	0.021	0.014
<b>Semivolatile Organic Analytical Parameters</b>								
Acenaphthene	mg/kg	0.09	0.13	570		<0.0068	<0.0067	<0.0067
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0050	<0.0049	<0.0049
Anthracene	mg/kg	0.25	0.4	12000		0.011	<0.0062	<0.0063
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.048	<0.0050	<0.0050
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.05	<0.0072	<0.0072
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		0.058	<0.0080	<0.0081
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		0.021	<0.012	<0.012
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.02	<0.011	<0.011
Chrysene	mg/kg	1.2	2.7	88		0.045	0.021	<0.010
Dibenz(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0073	<0.0072	<0.0072
Fluoranthene	mg/kg	2.7	4.1	3100		0.084	<0.0069	<0.0069
Fluorene	mg/kg	0.1	0.18	560		<0.0053	<0.0052	<0.0053
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.022	<0.0096	<0.0097
Phenanthrene	mg/kg	1.3	2.5	210		0.038	<0.0052	0.04
Pyrene	mg/kg	1.9	3.0	2300		0.069	<0.0074	<0.0074
Carbazole	mg/kg	---	---	0.6		<0.095	<0.092	<0.094
<b>Inorganic Analytical Parameters</b>								
Arsenic	mg/kg	---	13	11.3		3	9.6	6.2
Barium	mg/kg	---	110	1500		63	34	18
Cadmium	mg/kg	---	0.6	5.2		0.28	0.24	0.23
Chromium, total	mg/kg	---	16.2	21		16	13	9.8
Lead	mg/kg	---	36	107		21	13	9.5
Mercury	mg/kg	---	0.06	0.89		0.032	0.022	0.019
Selenium	mg/kg	---	0.48	1.3		0.71	0.69	0.86
Silver	mg/kg	---	0.55	4.4		0.25	0.18	0.17
Antimony	mg/kg	---	4.0	5		<0.22	<0.22	0.2
Beryllium	mg/kg	---	0.59	22		0.65	0.62	0.48
Calcium	mg/kg	---	9,300	---		3200	74000	92000
Cobalt	mg/kg	---	8.9	20		7.6	11	7.7
Copper	mg/kg	---	19.6	2900		17	24	26
Cyanide	mg/kg	---	0.51	---		<0.18	<0.17	<0.19
Iron	mg/kg	---	15,900	15000		14000	18000	14000
Magnesium	mg/kg	---	4,820	325000		3400	33000	38000
Manganese	mg/kg	---	636	630		240	500	480
Nickel	mg/kg	---	18	100		20	28	21
Potassium	mg/kg	---	1,268	---		1200	2600	2000
Sodium	mg/kg	---	130	---		97	150	150
Thallium	mg/kg	---	0.32	2.6		<0.29	<0.28	<0.26
Vanadium	mg/kg	---	25.2	550		27	18	14
Zinc	mg/kg	---	95	5100		55	52	61
pH			6.25	9		7.2	7.9	7.7

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 6 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B07 (0-5) Dup	2409V-2-B07 (5-10)	2409V-2-B07 (10-15)
				CCDD		(0-5)	(5-10)	(10-15)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018	06/05/2018	06/05/2018
				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	0.16	<0.010
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	---	---	---		<0.010	<0.010	<0.010
Barium,TCLP	mg/L	---	---	---		0.26	0.42	0.32
Cadmium,TCLP	mg/L	---	---	---		0.0038	0.0043	0.0022
Chromium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075	<0.0075	<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020	<0.00020	<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020	<0.020	<0.020
Silver,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060	<0.0060	<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040	<0.0040	<0.0040
Calcium,TCLP	mg/L	---	---	---		77	450	430
Cobalt,TCLP	mg/L	---	---	---		<0.010	0.024	0.031
Copper,TCLP	mg/L	---	---	---		<0.010	0.011	0.028
Cyanide,TCLP	mg/L	---	---	---		--	--	--
Iron,TCLP	mg/L	---	---	---		<0.20	<0.20	<0.20
Magnesium,TCLP	mg/L	---	---	---		28	100	79
Manganese,TCLP	mg/L	---	---	---		4.3	2.2	2
Nickel,TCLP	mg/L	---	---	---		0.017	0.051	0.063
Potassium,TCLP	mg/L	---	---	---		0.73	2.8	3.8
Sodium,TCLP	mg/L	---	---	---		--	--	--
Thallium,TCLP	mg/L	---	---	---		<0.0020	<0.0020	<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010	<0.010	<0.010
Zinc,TCLP	mg/L	---	---	---		0.074	<0.020	0.031

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 7 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B07 (15-21)
				CCDD	Sample Depth (feet)	(15-21)
		mg/kg	Date Collected	06/05/2018		
Chicago	MSAs	pH 6.25-9.0				
<b>Volatile Organic Analytical Parameters</b>						
Acetone	mg/kg	---	---	25		0.022
<b>Semivolatile Organic Analytical Parameters</b>						
Acenaphthene	mg/kg	0.09	0.13	570		<0.0068
Acenaphthylene	mg/kg	0.03	0.07	85		<0.0050
Anthracene	mg/kg	0.25	0.4	12000		<0.0063
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		<0.0051
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		<0.0074
Benzo(b)fluoranthene	mg/kg	1.5	2.1	0.9		<0.0082
Benzo(g,h,i)perylene	mg/kg	0.68	1.7	2300		<0.012
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		<0.011
Chrysene	mg/kg	1.2	2.7	88		0.013
Dibenz(a,h)anthracene	mg/kg	0.2	0.42	0.09		<0.0073
Fluoranthene	mg/kg	2.7	4.1	3100		<0.0070
Fluorene	mg/kg	0.1	0.18	560		<0.0053
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		<0.0098
Phenanthrene	mg/kg	1.3	2.5	210		0.033
Pyrene	mg/kg	1.9	3.0	2300		<0.0076
Carbazole	mg/kg	---	---	0.6		<0.095
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		5.2
Barium	mg/kg	---	110	1500		34
Cadmium	mg/kg	---	0.6	5.2		0.2
Chromium, total	mg/kg	---	16.2	21		15
Lead	mg/kg	---	36	107		10
Mercury	mg/kg	---	0.06	0.89		0.016
Selenium	mg/kg	---	0.48	1.3		1.1
Silver	mg/kg	---	0.55	4.4		0.15
Antimony	mg/kg	---	4.0	5		<0.22
Beryllium	mg/kg	---	0.59	22		0.7
Calcium	mg/kg	---	9,300	---		72000
Cobalt	mg/kg	---	8.9	20		10
Copper	mg/kg	---	19.6	2900		24
Cyanide	mg/kg	---	0.51	---		<0.18
Iron	mg/kg	---	15,900	15000		17000
Magnesium	mg/kg	---	4,820	325000		28000
Manganese	mg/kg	---	636	630		360
Nickel	mg/kg	---	18	100		26
Potassium	mg/kg	---	1,268	---		3200
Sodium	mg/kg	---	130	---		190
Thallium	mg/kg	---	0.32	2.6		<0.28
Vanadium	mg/kg	---	25.2	550		20
Zinc	mg/kg	---	95	5100		54
pH			6.25	9		8

**Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A**

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-2)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 8 of 8

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-2-B07 (15-21)
				CCDD		(15-21)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018
<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	---	---	---		0.22
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	---	---	---		<0.010
Barium,TCLP	mg/L	---	---	---		0.55
Cadmium,TCLP	mg/L	---	---	---		0.002
Chromium,TCLP	mg/L	---	---	---		<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020
Silver,TCLP	mg/L	---	---	---		<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		550
Cobalt,TCLP	mg/L	---	---	---		0.021
Copper,TCLP	mg/L	---	---	---		0.018
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.20
Magnesium,TCLP	mg/L	---	---	---		51
Manganese,TCLP	mg/L	---	---	---		2
Nickel,TCLP	mg/L	---	---	---		0.055
Potassium,TCLP	mg/L	---	---	---		4.7
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010
Zinc,TCLP	mg/L	---	---	---		<0.020

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

# 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: 500-146450-1

Client Project/Site: IDOT - Morton Grove - WO 049

For:

Terracon Consulting Eng & Scientists

192 Exchange Blvd

Glendale Heights, Illinois 60139

Attn: Mr. Matthew Weiss

*Jodie Bracken*

Authorized for release by:

6/21/2018 5:21:01 PM

Jodie Bracken, Project Management Assistant II

[jodie.bracken@testamericainc.com](mailto:jodie.bracken@testamericainc.com)

Designee for

Richard Wright, Senior Project Manager

(708)534-5200

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

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	4
Sample Summary .....	9
Client Sample Results .....	10
Definitions .....	30
Certification Summary .....	31
Chain of Custody .....	32
Receipt Checklists .....	33

# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Job ID: 500-146450-1

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-146450-1

### Receipt

The samples were received on 6/5/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3° C, 5.1° C, 5.4° C and 5.6° C.

### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS/LCSD associated with 437354: Bromomethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 437354 recovered outside control limits for the following analytes: Chloroethane.

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 laboratory control sample (LCS) for preparation batch 500-436422 and analytical batch 500-436747 recovered outside control limits for 3,3'-Dichlorobenzidine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.016	J	0.039	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.098	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.016	J	0.039	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0096	J	0.039	0.0055	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.023	J	0.039	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.27	J	1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	4.6		0.55	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	49		0.55	0.063	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.48		0.22	0.052	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.37	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		0.55	0.27	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	6.3		0.28	0.072	mg/Kg	1	⊗	6010B	Total/NA
Copper	44		0.55	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	12000	B	11	5.7	mg/Kg	1	⊗	6010B	Total/NA
Lead	230		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	21000	B	5.5	2.7	mg/Kg	1	⊗	6010B	Total/NA
Calcium	50000	B	110	19	mg/Kg	10	⊗	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1	⊗	6010B	Total/NA
Nickel	17		0.55	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.73		0.55	0.32	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.18	J	0.28	0.071	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	20		0.28	0.065	mg/Kg	1	⊗	6010B	Total/NA
Zinc	72		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1200		28	9.8	mg/Kg	1	⊗	6010B	Total/NA
Sodium	600		55	8.2	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0035	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	320		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.036		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	97		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.58	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.15	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.33		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025	B	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: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0087	J	0.016	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Arsenic	5.1		0.58	0.20	mg/Kg	1	⊗	6010B	Total/NA
Barium	70		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B04 (0-3) (Continued)

## Lab Sample ID: 500-146450-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.79		0.23	0.054	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.21	B	0.12	0.021	mg/Kg	1	⊗	6010B	Total/NA
Chromium	20		0.58	0.29	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	12		0.29	0.076	mg/Kg	1	⊗	6010B	Total/NA
Copper	17		0.58	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	⊗	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	4400	B	5.8	2.9	mg/Kg	1	⊗	6010B	Total/NA
Calcium	2600	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	410		0.58	0.084	mg/Kg	1	⊗	6010B	Total/NA
Nickel	27		0.58	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		0.58	0.34	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.32		0.29	0.075	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	31		0.29	0.069	mg/Kg	1	⊗	6010B	Total/NA
Zinc	60		1.2	0.51	mg/Kg	1	⊗	6010B	Total/NA
Potassium	2000		29	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	550		58	8.6	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	49		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.59		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	14		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.67	J	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.032	B	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: 2409V-1-B03 (0-3)

## Lab Sample ID: 500-146450-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014	J	0.017	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Anthracene	0.014	J	0.037	0.0063	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]anthracene	0.098		0.037	0.0051	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.19	0.094	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.13		0.037	0.010	mg/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	0.021	J	0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.21		0.037	0.0070	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	1	⊗	8270D	Total/NA
2-Methylnaphthalene	0.0082	J	0.076	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.071		0.037	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.18		0.037	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.31	J	1.1	0.22	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.7		0.57	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	62		0.57	0.065	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.61		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.51	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3) (Continued)**

**Lab Sample ID: 500-146450-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	19		0.57	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.1		0.28	0.075	mg/Kg	1	⊗	6010B	Total/NA
Copper	31		0.57	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	200		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	10000	B	5.7	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	370		0.57	0.083	mg/Kg	1	⊗	6010B	Total/NA
Nickel	21		0.57	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0		0.57	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.28		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	23		0.28	0.067	mg/Kg	1	⊗	6010B	Total/NA
Zinc	100		1.1	0.50	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1600		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	460		57	8.4	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J		0.0050	mg/L	1		6010B	TCLP
Calcium	200		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.034			0.0075	mg/L	1		6010B	TCLP
Magnesium	90		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.91		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.086	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.18			0.0075	mg/L	1		6010B	SPLP East
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.086	B		0.018	0.0061 mg/Kg	1	⊗	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0093	J	0.016	0.0071	mg/Kg	1	⊗	8260B	Total/NA
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.017	J	0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.021	J	0.040	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.010	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0078	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.019	J	0.040	0.0080	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.38	J	1.2	0.23	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.2		0.60	0.21	mg/Kg	1	⊗	6010B	Total/NA
Barium	81		0.60	0.069	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.53		0.24	0.056	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.12	0.022	mg/Kg	1	⊗	6010B	Total/NA
Chromium	13		0.60	0.30	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	16		0.30	0.079	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B02 (0-3) (Continued)

## Lab Sample ID: 500-146450-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	22		0.60	0.17	mg/Kg	1	⊗	6010B	Total/NA
Iron	18000	B	12	6.3	mg/Kg	1	⊗	6010B	Total/NA
Lead	30		0.30	0.14	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	19000	B	6.0	3.0	mg/Kg	1	⊗	6010B	Total/NA
Calcium	30000	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	870		0.60	0.087	mg/Kg	1	⊗	6010B	Total/NA
Nickel	30		0.60	0.18	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.79		0.60	0.35	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.27	J	0.30	0.078	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	26		0.30	0.071	mg/Kg	1	⊗	6010B	Total/NA
Zinc	46		1.2	0.53	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1500		30	11	mg/Kg	1	⊗	6010B	Total/NA
Sodium	250		60	8.9	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0039	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	270		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.015		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	140		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Lead	0.17		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031	B	0.020	0.0066	mg/Kg	1	⊗	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2409V-1-B01 (0-3)

## Lab Sample ID: 500-146450-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.036	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.045		0.040	0.0077	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.040	0.012	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.10	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.049		0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.070		0.040	0.0074	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.022	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.030	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.065		0.040	0.0079	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	5.2		0.56	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	56		0.56	0.064	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	17		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.0		0.28	0.074	mg/Kg	1	⊗	6010B	Total/NA
Copper	23		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	47		0.28	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3) (Continued)**

**Lab Sample ID: 500-146450-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4400	B	5.6	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3900	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	300		0.56	0.082	mg/Kg	1	⊗	6010B	Total/NA
Nickel	25		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.68		0.56	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.24	J	0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	25		0.28	0.066	mg/Kg	1	⊗	6010B	Total/NA
Zinc	64		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1700		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	390		56	8.3	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0046	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	110		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.38	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	46		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.30		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.073	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.32		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.78		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.083	B	0.018	0.0060	mg/Kg	1	⊗	7471B	Total/NA
pH	7.6		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146450-1	2409V-1-B05 (0-3)	Solid	06/05/18 07:40	06/05/18 18:30
500-146450-2	2409V-1-B04 (0-3)	Solid	06/05/18 08:10	06/05/18 18:30
500-146450-3	2409V-1-B03 (0-3)	Solid	06/05/18 08:35	06/05/18 18:30
500-146450-4	2409V-1-B02 (0-3)	Solid	06/05/18 08:55	06/05/18 18:30
500-146450-5	2409V-1-B01 (0-3)	Solid	06/05/18 09:15	06/05/18 18:30

1

2

3

4

5

6

7

8

9

10

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

Date Collected: 06/05/18 07:40

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-1**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0074		0.017	0.0074	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Carbon disulfide	<0.00088		0.0042	0.00088	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Carbon tetrachloride	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Chlorobenzene	<0.00063		0.0017	0.00063	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Chloroethane	<0.0013 *		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Chloroform	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
cis-1,3-Dichloropropene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethane	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloropropane	<0.00044		0.0017	0.00044	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Ethylbenzene	<0.00081		0.0017	0.00081	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Methylene Chloride	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
4-Methyl-2-pentanone (MIBK)	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Methyl tert-butyl ether	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Styrene	<0.00051		0.0017	0.00051	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,1,2,2-Tetrachloroethane	<0.00054		0.0017	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Tetrachloroethene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Toluene	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
trans-1,2-Dichloroethene	<0.00075		0.0017	0.00075	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,1,1-Trichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
1,1,2-Trichloroethane	<0.00073		0.0017	0.00073	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Trichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Vinyl chloride	<0.00075		0.0017	0.00075	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1
Xylenes, Total	<0.00054		0.0034	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		75 - 131	06/06/18 09:41	06/18/18 22:56	1
Dibromofluoromethane	111		75 - 126	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	06/06/18 09:41	06/18/18 22:56	1
Toluene-d8 (Surr)	116		75 - 124	06/06/18 09:41	06/18/18 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0070		0.039	0.0070	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Acenaphthylene	<0.0052		0.039	0.0052	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Anthracene	<0.0065		0.039	0.0065	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[a]anthracene	0.016 J		0.039	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[k]fluoranthene	<0.012		0.039	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethoxy)methane	<0.040		0.20	0.040	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethyl)ether	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-ethylhexyl) phthalate	<0.071		0.20	0.071	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Bromophenyl phenyl ether	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Butyl benzyl phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Carbazole</b>	<b>0.12</b>	<b>J</b>	0.20	0.098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloroaniline	<0.18		0.79	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloro-3-methylphenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chloronaphthalene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chlorophenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chlorophenyl phenyl ether	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.039	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenz(a,h)anthracene	<0.0076		0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenzofuran	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2-Dichlorobenzene	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,3-Dichlorobenzene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,4-Dichlorobenzene	<0.050		0.20	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3,3'-Dichlorobenzidine	<0.055	*	0.20	0.055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dichlorophenol	<0.093		0.39	0.093	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Diethyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dimethylphenol	<0.15		0.39	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dimethyl phthalate	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-butyl phthalate	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4,6-Dinitro-2-methylphenol	<0.31		0.79	0.31	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrophenol	<0.69		0.79	0.69	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrotoluene	<0.062		0.20	0.062	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,6-Dinitrotoluene	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-octyl phthalate	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Fluoranthene</b>	<b>0.024</b>	<b>J</b>	0.039	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Fluorene	<0.0055		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobenzene	<0.0091		0.079	0.0091	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobutadiene	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorocyclopentadiene	<0.22		0.79	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachloroethane	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Indeno[1,2,3-cd]pyrene	<0.010		0.039	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Isophorone	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylnaphthalene	<0.0072		0.079	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylphenol	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3 & 4 Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Naphthalene	<0.0060		0.039	0.0060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitroaniline	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3-Nitroaniline	<0.12		0.39	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Nitroaniline	<0.16		0.39	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene	<0.0098		0.039	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitrophenol	<0.092		0.39	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.37		0.79	0.37	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodi-n-propylamine	<0.048		0.079	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodiphenylamine	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,2'-oxybis[1-chloropropane]	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Pentachlorophenol	<0.63		0.79	0.63	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Phenanthrene</b>	<b>0.0096 J</b>		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Phenol	<0.087		0.20	0.087	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Pyrene</b>	<b>0.023 J</b>		0.039	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2,4-Trichlorobenzene	<0.042		0.20	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,5-Trichlorophenol	<0.089		0.39	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,6-Trichlorophenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	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				06/12/18 07:02	06/13/18 19:01	1
2-Fluorophenol	118		46 - 133				06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene-d5	90		41 - 120				06/12/18 07:02	06/13/18 19:01	1
Phenol-d5	102		46 - 125				06/12/18 07:02	06/13/18 19:01	1
Terphenyl-d14	109		35 - 160				06/12/18 07:02	06/13/18 19:01	1
2,4,6-Tribromophenol	75		25 - 139				06/12/18 07:02	06/13/18 19:01	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.27 J</b>		1.1	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Arsenic</b>	<b>4.6</b>		0.55	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Barium</b>	<b>49</b>		0.55	0.063	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Beryllium</b>	<b>0.48</b>		0.22	0.052	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cadmium</b>	<b>0.37 B</b>		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Chromium</b>	<b>14</b>		0.55	0.27	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cobalt</b>	<b>6.3</b>		0.28	0.072	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Copper</b>	<b>44</b>		0.55	0.15	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Iron</b>	<b>12000 B</b>		11	5.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Lead</b>	<b>230</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Magnesium</b>	<b>21000 B</b>		5.5	2.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Calcium</b>	<b>50000 B</b>		110	19	mg/Kg	⊗	06/07/18 08:45	06/09/18 04:50	10
<b>Manganese</b>	<b>340</b>		0.55	0.080	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Nickel</b>	<b>17</b>		0.55	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Selenium</b>	<b>0.73</b>		0.55	0.32	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Silver</b>	<b>0.18 J</b>		0.28	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
Thallium	<0.28		0.55	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Vanadium</b>	<b>20</b>		0.28	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Zinc</b>	<b>72</b>		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Potassium</b>	<b>1200</b>		28	9.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Sodium</b>	<b>600</b>		55	8.2	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Barium</b>	<b>0.30 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Cadmium</b>	<b>0.0035 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	320		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Copper	0.013 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:13	1
Lead	0.036		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:13	1
Magnesium	97		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Manganese	0.74		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Nickel	0.018 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Potassium	0.58 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Zinc	0.15 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.33		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:15	1
Manganese	0.64		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:15	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		06/12/18 16:35	06/13/18 13:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:53	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		06/12/18 14:05	06/14/18 07:28	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	B	0.018	0.0059	mg/Kg	✉	06/08/18 16:15	06/12/18 17:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.54	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.2		0.20	0.20	SU			06/12/18 14:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0087	J	0.016	0.0072	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromomethane	<0.0016 *		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Carbon disulfide	<0.00086		0.0041	0.00086	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Carbon tetrachloride	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chlorobenzene	<0.00061		0.0016	0.00061	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloroethane	<0.0012 *		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloromethane	<0.0017		0.0041	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
cis-1,3-Dichloropropene	<0.00050		0.0016	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Dibromochloromethane	<0.00054		0.0016	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethene	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloropropane	<0.00043		0.0016	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,3-Dichloropropene, Total	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Ethylbenzene	<0.00079		0.0016	0.00079	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Styrene	<0.00050		0.0016	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0016	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Tetrachloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Toluene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
trans-1,2-Dichloroethene	<0.00073		0.0016	0.00073	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
trans-1,3-Dichloropropene	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,2-Trichloroethane	<0.00071		0.0016	0.00071	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Trichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Vinyl chloride	<0.00073		0.0016	0.00073	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	06/06/18 09:41	06/18/18 23:25	1
Dibromofluoromethane	106		75 - 126	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	06/06/18 09:41	06/18/18 23:25	1
Toluene-d8 (Surr)	110		75 - 124	06/06/18 09:41	06/18/18 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[a]anthracene	<0.0054		0.040	0.0054	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[b]fluoranthene	<0.0086		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[g,h,i]perylene	<0.013		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Chrysene	<0.011		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrophenol	<0.70		0.81	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluoranthene	<0.0074		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Indeno[1,2,3-cd]pyrene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylnaphthalene	<0.0073		0.081	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pentachlorophenol	<0.64		0.81	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenanthrene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pyrene	<0.0079		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	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			06/12/18 07:02	06/13/18 20:24	1
2-Fluorophenol		123		46 - 133			06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene-d5		93		41 - 120			06/12/18 07:02	06/13/18 20:24	1
Phenol-d5		112		46 - 125			06/12/18 07:02	06/13/18 20:24	1
Terphenyl-d14		108		35 - 160			06/12/18 07:02	06/13/18 20:24	1
2,4,6-Tribromophenol		78		25 - 139			06/12/18 07:02	06/13/18 20:24	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.23		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Arsenic	5.1		0.58	0.20	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Barium	70		0.58	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Beryllium	0.79		0.23	0.054	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Chromium	20		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cobalt	12		0.29	0.076	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Copper	17		0.58	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Iron	20000	B	12	6.1	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Lead	16		0.29	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Magnesium	4400	B	5.8	2.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Calcium	2600	B	12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Manganese	410		0.58	0.084	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Nickel	27		0.58	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Selenium	1.1		0.58	0.34	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Silver	0.32		0.29	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Thallium	<0.29		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Vanadium	31		0.29	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Zinc	60		1.2	0.51	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Potassium	2000		29	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Sodium	550		58	8.6	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Barium	0.14	J	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Copper	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Iron	0.59		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:17	1
Magnesium	14		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Manganese	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Nickel	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Potassium	0.67 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	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		06/12/18 16:35	06/13/18 13:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:54	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		06/12/18 14:05	06/14/18 07:29	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:03	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.58	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.0		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

Date Collected: 06/05/18 08:35

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-3**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	J	0.017	0.0072	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Benzene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Butanone (MEK)	<0.0018		0.0042	0.0018	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chlorobenzene	<0.00061		0.0017	0.00061	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Dibromochloromethane	<0.00054		0.0017	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,3-Dichloropropene, Total	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,3-Dichloropropene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2-Trichloroethane	<0.00071		0.0017	0.00071	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl acetate	<0.0014		0.0042	0.0014	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		75 - 131	06/06/18 09:41	06/18/18 23:53	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	06/06/18 09:41	06/18/18 23:53	1
Toluene-d8 (Surr)	111		75 - 124	06/06/18 09:41	06/18/18 23:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0068		0.037	0.0068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Acenaphthylene	<0.0050		0.037	0.0050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Anthracene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Benzo[a]anthracene</b>	<b>0.098</b>		0.037	0.0051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethoxy)methane	<0.038		0.19	0.038	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethyl)ether	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-ethylhexyl) phthalate	<0.069		0.19	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Bromophenyl phenyl ether	<0.050		0.19	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Butyl benzyl phthalate	<0.072		0.19	0.072	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Carbazole	0.12 J		0.19	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloroaniline	<0.18		0.76	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloro-3-methylphenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chloronaphthalene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chlorophenol	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chlorophenyl phenyl ether	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Chrysene	0.13		0.037	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenz(a,h)anthracene	0.021 J		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenzofuran	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2-Dichlorobenzene	<0.045		0.19	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,3-Dichlorobenzene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,4-Dichlorobenzene	<0.048		0.19	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3,3'-Dichlorobenzidine	<0.053 *		0.19	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dichlorophenol	<0.090		0.37	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Diethyl phthalate	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dimethylphenol	<0.14		0.37	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dimethyl phthalate	<0.049		0.19	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-butyl phthalate	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4,6-Dinitro-2-methylphenol	<0.30		0.76	0.30	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrophenol	<0.66		0.76	0.66	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrotoluene	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,6-Dinitrotoluene	<0.074		0.19	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-octyl phthalate	<0.061		0.19	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluoranthene	0.21		0.037	0.0070	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluorene	<0.0053		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobenzene	<0.0087		0.076	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobutadiene	<0.059		0.19	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorocyclopentadiene	<0.22		0.76	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachloroethane	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Isophorone	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylnaphthalene	0.0082 J		0.076	0.0069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylphenol	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3 & 4 Methylphenol	<0.063		0.19	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Naphthalene	<0.0058		0.037	0.0058	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitroaniline	<0.051		0.19	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3-Nitroaniline	<0.12		0.37	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Nitroaniline	<0.16		0.37	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene	<0.0094		0.037	0.0094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitrophenol	<0.089		0.37	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.36		0.76	0.36	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodi-n-propylamine	<0.046		0.076	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodiphenylamine	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,2'-oxybis[1-chloropropane]	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Pentachlorophenol	<0.60		0.76	0.60	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Phenanthrene</b>	<b>0.071</b>		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Phenol	<0.084		0.19	0.084	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Pyrene</b>	<b>0.18</b>		0.037	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2,4-Trichlorobenzene	<0.041		0.19	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,5-Trichlorophenol	<0.086		0.37	0.086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,6-Trichlorophenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	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				06/12/18 07:02	06/13/18 20:51	1
2-Fluorophenol	116		46 - 133				06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 20:51	1
Phenol-d5	109		46 - 125				06/12/18 07:02	06/13/18 20:51	1
Terphenyl-d14	104		35 - 160				06/12/18 07:02	06/13/18 20:51	1
2,4,6-Tribromophenol	80		25 - 139				06/12/18 07:02	06/13/18 20:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.31</b>	<b>J</b>	1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Arsenic</b>	<b>6.7</b>		0.57	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Barium</b>	<b>62</b>		0.57	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Beryllium</b>	<b>0.61</b>		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cadmium</b>	<b>0.51</b>	<b>B</b>	0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Chromium</b>	<b>19</b>		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cobalt</b>	<b>9.1</b>		0.28	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Copper</b>	<b>31</b>		0.57	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Iron</b>	<b>16000</b>	<b>B</b>	11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Lead</b>	<b>200</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Magnesium</b>	<b>10000</b>	<b>B</b>	5.7	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Calcium</b>	<b>15000</b>	<b>B</b>	11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Manganese</b>	<b>370</b>		0.57	0.083	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Nickel</b>	<b>21</b>		0.57	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Selenium</b>	<b>1.0</b>		0.57	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Silver</b>	<b>0.28</b>		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
Thallium	<0.28		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Vanadium</b>	<b>23</b>		0.28	0.067	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Zinc</b>	<b>100</b>		1.1	0.50	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Potassium</b>	<b>1600</b>		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Sodium</b>	<b>460</b>		57	8.4	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Cadmium</b>	<b>0.0040</b>	<b>J</b>	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:22	1
Lead	0.034		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:22	1
Magnesium	90		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Manganese	0.91		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Zinc	0.086 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	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		06/12/18 15:23	06/14/18 00:23	1
Manganese	0.42		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:23	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		06/12/18 16:35	06/13/18 13:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:55	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		06/12/18 14:05	06/14/18 07:31	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086 B		0.018	0.0061	mg/Kg	✉	06/08/18 16:15	06/12/18 17:05	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.57	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.4		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

Date Collected: 06/05/18 08:55

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-4**

Matrix: Solid

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0093	J	0.016	0.0071	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromomethane	<0.0015	*	0.0041	0.0015	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon disulfide	<0.00085		0.0041	0.00085	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon tetrachloride	<0.00047		0.0016	0.00047	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chlorobenzene	<0.00060		0.0016	0.00060	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroethane	<0.0012	*	0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloromethane	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,3-Dichloropropene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Dibromochloromethane	<0.00053		0.0016	0.00053	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloropropane	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,3-Dichloropropene, Total	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Ethylbenzene	<0.00078		0.0016	0.00078	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Styrene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2,2-Tetrachloroethane	<0.00052		0.0016	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Tetrachloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Toluene	<0.00041		0.0016	0.00041	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,2-Dichloroethene	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,3-Dichloropropene	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2-Trichloroethane	<0.00070		0.0016	0.00070	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Trichloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl chloride	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Xylenes, Total	<0.00052		0.0033	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131			1
Dibromofluoromethane	105		75 - 126			1
1,2-Dichloroethane-d4 (Surr)	109		70 - 134			1
Toluene-d8 (Surr)	112		75 - 124			1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-ethylhexyl) phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Butyl benzyl phthalate	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chloronaphthalene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chlorophenol	<0.069		0.20	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Chrysene</b>	<b>0.017</b>	<b>J</b>	0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenz(a,h)anthracene	<0.0078		0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,4-Dichlorobenzene	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dichlorophenol	<0.096		0.40	0.096	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dimethyl phthalate	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrophenol	<0.71		0.81	0.71	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrotoluene	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-octyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.040	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Fluorene	<0.0057		0.040	0.0057	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.010</b>	<b>J</b>	0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylnaphthalene	<0.0074		0.081	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Naphthalene	<0.0062		0.040	0.0062	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitrophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodiphenylamine	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,2'-oxybis[1-chloropropane]	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Pentachlorophenol	<0.65		0.81	0.65	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Phenanthrene</b>	<b>0.0078 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Phenol	<0.090		0.20	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Pyrene</b>	<b>0.019 J</b>		0.040	0.0080	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,5-Trichlorophenol	<0.092		0.40	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	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	98			44 - 121			06/12/18 07:02	06/13/18 21:19	1
2-Fluorophenol	120			46 - 133			06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene-d5	91			41 - 120			06/12/18 07:02	06/13/18 21:19	1
Phenol-d5	109			46 - 125			06/12/18 07:02	06/13/18 21:19	1
Terphenyl-d14	109			35 - 160			06/12/18 07:02	06/13/18 21:19	1
2,4,6-Tribromophenol	81			25 - 139			06/12/18 07:02	06/13/18 21:19	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.38 J</b>		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Arsenic</b>	<b>6.2</b>		0.60	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Barium</b>	<b>81</b>		0.60	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Beryllium</b>	<b>0.53</b>		0.24	0.056	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cadmium</b>	<b>0.36 B</b>		0.12	0.022	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Chromium</b>	<b>13</b>		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cobalt</b>	<b>16</b>		0.30	0.079	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Copper</b>	<b>22</b>		0.60	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Iron</b>	<b>18000 B</b>		12	6.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Lead</b>	<b>30</b>		0.30	0.14	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Magnesium</b>	<b>19000 B</b>		6.0	3.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Calcium</b>	<b>30000 B</b>		12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Manganese</b>	<b>870</b>		0.60	0.087	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Nickel</b>	<b>30</b>		0.60	0.18	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Selenium</b>	<b>0.79</b>		0.60	0.35	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Silver</b>	<b>0.27 J</b>		0.30	0.078	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
Thallium	<0.30		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Vanadium</b>	<b>26</b>		0.30	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Zinc</b>	<b>46</b>		1.2	0.53	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Sodium</b>	<b>250</b>		60	8.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
<b>Barium</b>	<b>0.28 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
<b>Cadmium</b>	<b>0.0039 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:26	1
Lead	0.015		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:26	1
Magnesium	140		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Manganese	1.1		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.17		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:35	1
Manganese	0.36		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:35	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		06/12/18 16:35	06/13/18 13:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:56	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		06/12/18 14:05	06/14/18 07:33	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.020	0.0066	mg/Kg	✉	06/08/18 16:15	06/12/18 17:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.59	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	7.8		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

Date Collected: 06/05/18 09:15

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-5**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0073		0.017	0.0073	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chlorobenzene	<0.00062		0.0017	0.00062	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2-Trichloroethane	<0.00072		0.0017	0.00072	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 131	06/06/18 09:41	06/19/18 00:48	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	06/06/18 09:41	06/19/18 00:48	1
Toluene-d8 (Surr)	113		75 - 124	06/06/18 09:41	06/19/18 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Benzo[a]anthracene	0.036 J		0.040	0.0054	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15

Matrix: Solid

Date Received: 06/05/18 18:30

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	0.045		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[g,h,i]perylene	0.025 J		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[k]fluoranthene	0.018 J		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Carbazole	0.12 J		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloroaniline	<0.19		0.80	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Chrysene	0.049		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4,6-Dinitro-2-methylphenol	<0.32		0.80	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrophenol	<0.70		0.80	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,6-Dinitrotoluene	<0.078		0.20	0.078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluoranthene	0.070		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobenzene	<0.0093		0.080	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorocyclopentadiene	<0.23		0.80	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Indeno[1,2,3-cd]pyrene	0.022 J		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylnaphthalene	<0.0073		0.080	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

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	<0.38		0.80	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodi-n-propylamine	<0.049		0.080	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Pentachlorophenol	<0.64		0.80	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Phenanthrene</b>	<b>0.030 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Pyrene</b>	<b>0.065</b>		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	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				06/12/18 07:02	06/13/18 21:46	1
2-Fluorophenol	120		46 - 133				06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 21:46	1
Phenol-d5	104		46 - 125				06/12/18 07:02	06/13/18 21:46	1
Terphenyl-d14	103		35 - 160				06/12/18 07:02	06/13/18 21:46	1
2,4,6-Tribromophenol	81		25 - 139				06/12/18 07:02	06/13/18 21:46	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Arsenic</b>	<b>5.2</b>		0.56	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Barium</b>	<b>56</b>		0.56	0.064	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Beryllium</b>	<b>0.65</b>		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Cadmium	0.36 B		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Chromium	17		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Cobalt	9.0		0.28	0.074	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Copper	23		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Iron	16000 B		11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Lead	47		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Magnesium	4400 B		5.6	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Calcium	3900 B		11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Manganese	300		0.56	0.082	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Nickel	25		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Selenium	0.68		0.56	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Silver	0.24 J		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Thallium	<0.28		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Vanadium	25		0.28	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Zinc	64		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Potassium	1700		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Sodium	390		56	8.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
<b>Barium</b>	<b>0.27 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
<b>Cadmium</b>	<b>0.0046 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Copper	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Iron	0.38 J		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:30	1
Lead	0.016		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:30	1
Magnesium	46		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Manganese	0.30		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Nickel	0.015 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Potassium	1.3 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Zinc	0.073 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.32		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:39	1
Manganese	0.78		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:39	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		06/12/18 16:35	06/13/18 13:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:57	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		06/12/18 14:05	06/14/18 07:34	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.55	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:02	1
pH	7.6		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control 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
*	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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## 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	04-30-19

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
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

1

2

3

4

5

6

7

8

9

10

# TestAmerica

THE LEADER IN ENVIRONMENTAL



2417 Bond Street, University Park, IL 604  
Phone: 708.534.5200 Fax: 708.534.

500-146450 900

#### Turnaround Time Required (Business Days)

1 Day     2 Days     5 Days     7 Days     10 Days     15 Days     Other

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

Bellnoticed By

Relinquished By	Pawpaw	Company	Date	Time	Received By	Loffman	Company	Date	Time	Lab Courier
Relinquished By	Terracor	Company	6/05/18	1615	Received By	TAL	Company	6-5-18	1645	
Relinquished By	O HHR	Company	6-5-18	1830	Received By	Shawleath	TA OHL	6/6/18	0805	Shipped
Relinquished By		Company	Date	Time	Received By		Company	Date	Time	Hand Delivered

Matrix Key

WW - Wastewater SE - Sediment  
WS - Wastewater  
SS - Sediment

W - Water

S - Soil

SL - Sludge

## **MS - Miscellaneous**

OL ~ OII

A - Air

## **Client Comments**

No Aluminum

SPLP As directed by Terracon

### Lab Comments

—  
—  
—

Lab Courier

Shipped

Hand Delivered

Hand Controled

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-146450-1

**Login Number: 146450**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	2.3,5.4,5.1,5.6
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 <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Illinois Environmental Protection Agency

Page 1 of 2

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: FAU 1312-Golf Road at Harms Road Office Phone Number, if available: \_\_\_\_\_

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

Golf Road (Eastbound) IDOT STA 379+70 to 380+98.57 (ISGS Site 2409V-9)

City: Morton Grove State: IL Zip Code: 60077

County: Cook Township: Niles

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

Latitude: 42.05542 Longitude: -87.76638  
(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

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

#### Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

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

City: Schaumburg State: IL

Zip Code: 60196 Phone: 847-705-4122

Contact: Kristine Kutscher

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

Project Name: FAU 1312-Golf Road at Harms Road  
 Latitude: 42.05542 Longitude: -87.76638

### 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 2409V-9.

See Exhibits 3, 3A, and Table 6 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 J146450-1.

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: 135 Ambassador Drive

City: Naperville State: IL Zip Code: 60540

Phone: 630-717-4263

*Matt Weiss*

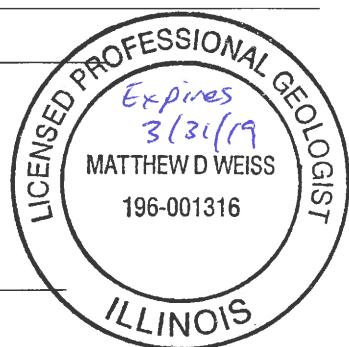
Printed Name:

*Noel*

Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

*8/3/18*

Date:



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

Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-9)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 1 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-9-B01 (0-2)
				CCDD	Sample Depth (feet)	(0-2)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018
<b>Semivolatile Organic Analytical Parameters</b>						
Anthracene	mg/kg	0.25	0.4	12000		0.0074
Benzo(a)anthracene	mg/kg	1.1	1.8	0.9		0.041
Benzo(a)pyrene	mg/kg	1.3	2.1	0.09		0.041
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		0.027
Benzo(k)fluoranthene	mg/kg	0.99	1.7	9		0.019
Chrysene	mg/kg	1.2	2.7	88		0.053
Fluoranthene	mg/kg	2.7	4.1	3100		0.08
Indeno(1,2,3-c,d)pyrene	mg/kg	0.86	1.6	0.9		0.025
Phenanthrene	mg/kg	1.3	2.5	210		0.039
Pyrene	mg/kg	1.9	3.0	2300		0.076
<b>Inorganic Analytical Parameters</b>						
Arsenic	mg/kg	---	13	11.3		5
Barium	mg/kg	---	110	1500		100
Cadmium	mg/kg	---	0.6	5.2		0.48
Chromium, total	mg/kg	---	16.2	21		24
Lead	mg/kg	---	36	107		65
Mercury	mg/kg	---	0.06	0.89		0.059
Selenium	mg/kg	---	0.48	1.3		1.4
Silver	mg/kg	---	0.55	4.4		0.31
Antimony	mg/kg	---	4.0	5		<0.24
Beryllium	mg/kg	---	0.59	22		0.93
Calcium	mg/kg	---	9,300	---		5200
Cobalt	mg/kg	---	8.9	20		12
Copper	mg/kg	---	19.6	2900		22
Cyanide	mg/kg	---	0.51	---		<0.21
Iron	mg/kg	---	15,900	15000		19000
Magnesium	mg/kg	---	4,820	325000		5400
Manganese	mg/kg	---	636	630		540
Nickel	mg/kg	---	18	100		31
Potassium	mg/kg	---	1,268	---		1800
Sodium	mg/kg	---	130	---		1300
Thallium	mg/kg	---	0.32	2.6		<0.30
Vanadium	mg/kg	---	25.2	550		36
Zinc	mg/kg	---	95	5100		95
pH			6.25	9		7.8

## Comparison of Detected Constituents to MACs-PTB 174-009; Work Order:049A

Preliminary Site Investigation

FAU 1312 -Golf Rd at Harms Rd (PESA #2409V-9)

Morton Grove, Cook County, IL

Terracon Project No. 11187007J

Page 2 of 2

Analyte	Units	Background		Maximum Allowed Concentration	Sample Identification	2409V-9-B01 (0-2)
				CCDD	Sample Depth (feet)	(0-2)
		Chicago	MSAs	mg/kg	Date Collected	06/05/2018
<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	---	---	---		--
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	---	---	---		<0.010
Barium,TCLP	mg/L	---	---	---		0.19
Cadmium,TCLP	mg/L	---	---	---		0.0024
Chromium,TCLP	mg/L	---	---	---		<0.010
Lead,TCLP	mg/L	---	---	---		<0.0075
Mercury,TCLP	mg/L	---	---	---		<0.00020
Selenium,TCLP	mg/L	---	---	---		<0.020
Silver,TCLP	mg/L	---	---	---		<0.010
Antimony,TCLP	mg/L	---	---	---		<0.0060
Beryllium,TCLP	mg/L	---	---	---		<0.0040
Calcium,TCLP	mg/L	---	---	---		84
Cobalt,TCLP	mg/L	---	---	---		<0.010
Copper,TCLP	mg/L	---	---	---		<0.010
Cyanide,TCLP	mg/L	---	---	---		--
Iron,TCLP	mg/L	---	---	---		<0.20
Magnesium,TCLP	mg/L	---	---	---		26
Manganese,TCLP	mg/L	---	---	---		0.14
Nickel,TCLP	mg/L	---	---	---		<0.010
Potassium,TCLP	mg/L	---	---	---		0.55
Sodium,TCLP	mg/L	---	---	---		--
Thallium,TCLP	mg/L	---	---	---		<0.0020
Vanadium,TCLP	mg/L	---	---	---		<0.010
Zinc,TCLP	mg/L	---	---	---		0.091

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

# 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: 500-146450-1

Client Project/Site: IDOT - Morton Grove - WO 049

For:

Terracon Consulting Eng & Scientists

192 Exchange Blvd

Glendale Heights, Illinois 60139

Attn: Mr. Matthew Weiss

*Jodie Bracken*

Authorized for release by:

6/21/2018 5:21:01 PM

Jodie Bracken, Project Management Assistant II

[jodie.bracken@testamericainc.com](mailto:jodie.bracken@testamericainc.com)

Designee for

Richard Wright, Senior Project Manager

(708)534-5200

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

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	4
Sample Summary .....	9
Client Sample Results .....	10
Definitions .....	30
Certification Summary .....	31
Chain of Custody .....	32
Receipt Checklists .....	33

# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Job ID: 500-146450-1

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-146450-1

### Receipt

The samples were received on 6/5/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3° C, 5.1° C, 5.4° C and 5.6° C.

### GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS/LCSD associated with 437354: Bromomethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 437354 recovered outside control limits for the following analytes: Chloroethane.

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 laboratory control sample (LCS) for preparation batch 500-436422 and analytical batch 500-436747 recovered outside control limits for 3,3'-Dichlorobenzidine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.016	J	0.039	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.098	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.016	J	0.039	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.024	J	0.039	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0096	J	0.039	0.0055	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.023	J	0.039	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.27	J	1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	4.6		0.55	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	49		0.55	0.063	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.48		0.22	0.052	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.37	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		0.55	0.27	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	6.3		0.28	0.072	mg/Kg	1	⊗	6010B	Total/NA
Copper	44		0.55	0.15	mg/Kg	1	⊗	6010B	Total/NA
Iron	12000	B	11	5.7	mg/Kg	1	⊗	6010B	Total/NA
Lead	230		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	21000	B	5.5	2.7	mg/Kg	1	⊗	6010B	Total/NA
Calcium	50000	B	110	19	mg/Kg	10	⊗	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1	⊗	6010B	Total/NA
Nickel	17		0.55	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.73		0.55	0.32	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.18	J	0.28	0.071	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	20		0.28	0.065	mg/Kg	1	⊗	6010B	Total/NA
Zinc	72		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1200		28	9.8	mg/Kg	1	⊗	6010B	Total/NA
Sodium	600		55	8.2	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0035	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	320		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.036		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	97		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.58	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.15	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.33		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.64		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025	B	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: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0087	J	0.016	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Arsenic	5.1		0.58	0.20	mg/Kg	1	⊗	6010B	Total/NA
Barium	70		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B04 (0-3) (Continued)

## Lab Sample ID: 500-146450-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.79		0.23	0.054	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.21	B	0.12	0.021	mg/Kg	1	⊗	6010B	Total/NA
Chromium	20		0.58	0.29	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	12		0.29	0.076	mg/Kg	1	⊗	6010B	Total/NA
Copper	17		0.58	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	⊗	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	4400	B	5.8	2.9	mg/Kg	1	⊗	6010B	Total/NA
Calcium	2600	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	410		0.58	0.084	mg/Kg	1	⊗	6010B	Total/NA
Nickel	27		0.58	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		0.58	0.34	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.32		0.29	0.075	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	31		0.29	0.069	mg/Kg	1	⊗	6010B	Total/NA
Zinc	60		1.2	0.51	mg/Kg	1	⊗	6010B	Total/NA
Potassium	2000		29	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	550		58	8.6	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	49		5.0	0.50	mg/L	1		6010B	TCLP
Iron	0.59		0.40	0.20	mg/L	1		6010B	TCLP
Magnesium	14		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	0.67	J	2.5	0.50	mg/L	1		6010B	TCLP
Mercury	0.032	B	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: 2409V-1-B03 (0-3)

## Lab Sample ID: 500-146450-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014	J	0.017	0.0072	mg/Kg	1	⊗	8260B	Total/NA
Anthracene	0.014	J	0.037	0.0063	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]anthracene	0.098		0.037	0.0051	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.19	0.094	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.13		0.037	0.010	mg/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	0.021	J	0.037	0.0073	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.21		0.037	0.0070	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	1	⊗	8270D	Total/NA
2-Methylnaphthalene	0.0082	J	0.076	0.0069	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.071		0.037	0.0053	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.18		0.037	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.31	J	1.1	0.22	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.7		0.57	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	62		0.57	0.065	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.61		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.51	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3) (Continued)**

**Lab Sample ID: 500-146450-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	19		0.57	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.1		0.28	0.075	mg/Kg	1	⊗	6010B	Total/NA
Copper	31		0.57	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	200		0.28	0.13	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	10000	B	5.7	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	370		0.57	0.083	mg/Kg	1	⊗	6010B	Total/NA
Nickel	21		0.57	0.17	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0		0.57	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.28		0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	23		0.28	0.067	mg/Kg	1	⊗	6010B	Total/NA
Zinc	100		1.1	0.50	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1600		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	460		57	8.4	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J		0.0050	mg/L	1		6010B	TCLP
Calcium	200		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.034			0.0075	mg/L	1		6010B	TCLP
Magnesium	90		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.91		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.086	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.18			0.0075	mg/L	1		6010B	SPLP East
Manganese	0.42		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.086	B		0.018	0.0061 mg/Kg	1	⊗	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0093	J	0.016	0.0071	mg/Kg	1	⊗	8260B	Total/NA
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.017	J	0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.021	J	0.040	0.0075	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.010	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.0078	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.019	J	0.040	0.0080	mg/Kg	1	⊗	8270D	Total/NA
Antimony	0.38	J	1.2	0.23	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	6.2		0.60	0.21	mg/Kg	1	⊗	6010B	Total/NA
Barium	81		0.60	0.069	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.53		0.24	0.056	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.12	0.022	mg/Kg	1	⊗	6010B	Total/NA
Chromium	13		0.60	0.30	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	16		0.30	0.079	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Client Sample ID: 2409V-1-B02 (0-3) (Continued)

## Lab Sample ID: 500-146450-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	22		0.60	0.17	mg/Kg	1	⊗	6010B	Total/NA
Iron	18000	B	12	6.3	mg/Kg	1	⊗	6010B	Total/NA
Lead	30		0.30	0.14	mg/Kg	1	⊗	6010B	Total/NA
Magnesium	19000	B	6.0	3.0	mg/Kg	1	⊗	6010B	Total/NA
Calcium	30000	B	12	2.0	mg/Kg	1	⊗	6010B	Total/NA
Manganese	870		0.60	0.087	mg/Kg	1	⊗	6010B	Total/NA
Nickel	30		0.60	0.18	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.79		0.60	0.35	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.27	J	0.30	0.078	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	26		0.30	0.071	mg/Kg	1	⊗	6010B	Total/NA
Zinc	46		1.2	0.53	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1500		30	11	mg/Kg	1	⊗	6010B	Total/NA
Sodium	250		60	8.9	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0039	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	270		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.015		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	140		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.0	J	2.5	0.50	mg/L	1		6010B	TCLP
Lead	0.17		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031	B	0.020	0.0066	mg/Kg	1	⊗	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

## Client Sample ID: 2409V-1-B01 (0-3)

## Lab Sample ID: 500-146450-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.036	J	0.040	0.0054	mg/Kg	1	⊗	8270D	Total/NA
Benzo[a]pyrene	0.045		0.040	0.0077	mg/Kg	1	⊗	8270D	Total/NA
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	1	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.040	0.013	mg/Kg	1	⊗	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.040	0.012	mg/Kg	1	⊗	8270D	Total/NA
Carbazole	0.12	J	0.20	0.10	mg/Kg	1	⊗	8270D	Total/NA
Chrysene	0.049		0.040	0.011	mg/Kg	1	⊗	8270D	Total/NA
Fluoranthene	0.070		0.040	0.0074	mg/Kg	1	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.022	J	0.040	0.010	mg/Kg	1	⊗	8270D	Total/NA
Phenanthrene	0.030	J	0.040	0.0056	mg/Kg	1	⊗	8270D	Total/NA
Pyrene	0.065		0.040	0.0079	mg/Kg	1	⊗	8270D	Total/NA
Arsenic	5.2		0.56	0.19	mg/Kg	1	⊗	6010B	Total/NA
Barium	56		0.56	0.064	mg/Kg	1	⊗	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.36	B	0.11	0.020	mg/Kg	1	⊗	6010B	Total/NA
Chromium	17		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Cobalt	9.0		0.28	0.074	mg/Kg	1	⊗	6010B	Total/NA
Copper	23		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Iron	16000	B	11	5.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	47		0.28	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3) (Continued)**

**Lab Sample ID: 500-146450-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4400	B	5.6	2.8	mg/Kg	1	⊗	6010B	Total/NA
Calcium	3900	B	11	1.9	mg/Kg	1	⊗	6010B	Total/NA
Manganese	300		0.56	0.082	mg/Kg	1	⊗	6010B	Total/NA
Nickel	25		0.56	0.16	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.68		0.56	0.33	mg/Kg	1	⊗	6010B	Total/NA
Silver	0.24	J	0.28	0.073	mg/Kg	1	⊗	6010B	Total/NA
Vanadium	25		0.28	0.066	mg/Kg	1	⊗	6010B	Total/NA
Zinc	64		1.1	0.49	mg/Kg	1	⊗	6010B	Total/NA
Potassium	1700		28	10	mg/Kg	1	⊗	6010B	Total/NA
Sodium	390		56	8.3	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0046	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Calcium	110		5.0	0.50	mg/L	1		6010B	TCLP
Copper	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.38	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Magnesium	46		2.5	0.50	mg/L	1		6010B	TCLP
Manganese	0.30		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Potassium	1.3	J	2.5	0.50	mg/L	1		6010B	TCLP
Zinc	0.073	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.32		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.78		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.083	B	0.018	0.0060	mg/Kg	1	⊗	7471B	Total/NA
pH	7.6		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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146450-1	2409V-1-B05 (0-3)	Solid	06/05/18 07:40	06/05/18 18:30
500-146450-2	2409V-1-B04 (0-3)	Solid	06/05/18 08:10	06/05/18 18:30
500-146450-3	2409V-1-B03 (0-3)	Solid	06/05/18 08:35	06/05/18 18:30
500-146450-4	2409V-1-B02 (0-3)	Solid	06/05/18 08:55	06/05/18 18:30
500-146450-5	2409V-1-B01 (0-3)	Solid	06/05/18 09:15	06/05/18 18:30

1

2

3

4

5

6

7

8

9

10

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

Date Collected: 06/05/18 07:40

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-1**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0074		0.017	0.0074	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Carbon disulfide	<0.00088		0.0042	0.00088	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Carbon tetrachloride	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chlorobenzene	<0.00063		0.0017	0.00063	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloroethane	<0.0013 *		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloroform	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
cis-1,3-Dichloropropene	<0.00051		0.0017	0.00051	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethane	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1-Dichloroethene	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloropropane	<0.00044		0.0017	0.00044	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Ethylbenzene	<0.00081		0.0017	0.00081	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Methylene Chloride	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
4-Methyl-2-pentanone (MIBK)	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Methyl tert-butyl ether	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Styrene	<0.00051		0.0017	0.00051	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,2,2-Tetrachloroethane	<0.00054		0.0017	0.00054	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Tetrachloroethene	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Toluene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
trans-1,2-Dichloroethene	<0.00075		0.0017	0.00075	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,1-Trichloroethane	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
1,1,2-Trichloroethane	<0.00073		0.0017	0.00073	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Trichloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Vinyl chloride	<0.00075		0.0017	0.00075	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1
Xylenes, Total	<0.00054		0.0034	0.00054	mg/Kg	☀	06/06/18 09:41	06/18/18 22:56	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		75 - 131	06/06/18 09:41	06/18/18 22:56	1
Dibromofluoromethane	111		75 - 126	06/06/18 09:41	06/18/18 22:56	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	06/06/18 09:41	06/18/18 22:56	1
Toluene-d8 (Surr)	116		75 - 124	06/06/18 09:41	06/18/18 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0070		0.039	0.0070	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Acenaphthylene	<0.0052		0.039	0.0052	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Anthracene	<0.0065		0.039	0.0065	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1
Benzo[a]anthracene	0.016 J		0.039	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.018	J	0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[b]fluoranthene	0.020	J	0.039	0.0084	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Benzo[k]fluoranthene	<0.012		0.039	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethoxy)methane	<0.040		0.20	0.040	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-chloroethyl)ether	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Bis(2-ethylhexyl) phthalate	<0.071		0.20	0.071	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Bromophenyl phenyl ether	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Butyl benzyl phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Carbazole</b>	<b>0.12</b>	<b>J</b>	0.20	0.098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloroaniline	<0.18		0.79	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chloro-3-methylphenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chloronaphthalene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Chlorophenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Chlorophenyl phenyl ether	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.039	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenz(a,h)anthracene	<0.0076		0.039	0.0076	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dibenzofuran	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2-Dichlorobenzene	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,3-Dichlorobenzene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,4-Dichlorobenzene	<0.050		0.20	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3,3'-Dichlorobenzidine	<0.055	*	0.20	0.055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dichlorophenol	<0.093		0.39	0.093	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Diethyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dimethylphenol	<0.15		0.39	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Dimethyl phthalate	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-butyl phthalate	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4,6-Dinitro-2-methylphenol	<0.31		0.79	0.31	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrophenol	<0.69		0.79	0.69	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4-Dinitrotoluene	<0.062		0.20	0.062	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,6-Dinitrotoluene	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Di-n-octyl phthalate	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Fluoranthene</b>	<b>0.024</b>	<b>J</b>	0.039	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Fluorene	<0.0055		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobenzene	<0.0091		0.079	0.0091	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorobutadiene	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachlorocyclopentadiene	<0.22		0.79	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Hexachloroethane	<0.059		0.20	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Indeno[1,2,3-cd]pyrene	<0.010		0.039	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Isophorone	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylnaphthalene	<0.0072		0.079	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Methylphenol	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3 & 4 Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Naphthalene	<0.0060		0.039	0.0060	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitroaniline	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
3-Nitroaniline	<0.12		0.39	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
4-Nitroaniline	<0.16		0.39	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene	<0.0098		0.039	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2-Nitrophenol	<0.092		0.39	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.37		0.79	0.37	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodi-n-propylamine	<0.048		0.079	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
N-Nitrosodiphenylamine	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,2'-oxybis[1-chloropropane]	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Pentachlorophenol	<0.63		0.79	0.63	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Phenanthrene</b>	<b>0.0096 J</b>		0.039	0.0055	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
Phenol	<0.087		0.20	0.087	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
<b>Pyrene</b>	<b>0.023 J</b>		0.039	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
1,2,4-Trichlorobenzene	<0.042		0.20	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,5-Trichlorophenol	<0.089		0.39	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	1
2,4,6-Trichlorophenol	<0.13		0.39	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 19:01	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			06/12/18 07:02	06/13/18 19:01	1
2-Fluorophenol	118			46 - 133			06/12/18 07:02	06/13/18 19:01	1
Nitrobenzene-d5	90			41 - 120			06/12/18 07:02	06/13/18 19:01	1
Phenol-d5	102			46 - 125			06/12/18 07:02	06/13/18 19:01	1
Terphenyl-d14	109			35 - 160			06/12/18 07:02	06/13/18 19:01	1
2,4,6-Tribromophenol	75			25 - 139			06/12/18 07:02	06/13/18 19:01	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.27 J</b>		1.1	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Arsenic</b>	<b>4.6</b>		0.55	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Barium</b>	<b>49</b>		0.55	0.063	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Beryllium</b>	<b>0.48</b>		0.22	0.052	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cadmium</b>	<b>0.37 B</b>		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Chromium</b>	<b>14</b>		0.55	0.27	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Cobalt</b>	<b>6.3</b>		0.28	0.072	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Copper</b>	<b>44</b>		0.55	0.15	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Iron</b>	<b>12000 B</b>		11	5.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Lead</b>	<b>230</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Magnesium</b>	<b>21000 B</b>		5.5	2.7	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Calcium</b>	<b>50000 B</b>		110	19	mg/Kg	⊗	06/07/18 08:45	06/09/18 04:50	10
<b>Manganese</b>	<b>340</b>		0.55	0.080	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Nickel</b>	<b>17</b>		0.55	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Selenium</b>	<b>0.73</b>		0.55	0.32	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Silver</b>	<b>0.18 J</b>		0.28	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
Thallium	<0.28		0.55	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Vanadium</b>	<b>20</b>		0.28	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Zinc</b>	<b>72</b>		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Potassium</b>	<b>1200</b>		28	9.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1
<b>Sodium</b>	<b>600</b>		55	8.2	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Barium</b>	<b>0.30 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1
<b>Cadmium</b>	<b>0.0035 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:13	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B05 (0-3)**

**Lab Sample ID: 500-146450-1**

Date Collected: 06/05/18 07:40

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	320		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Copper	0.013 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:13	1
Lead	0.036		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:13	1
Magnesium	97		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Manganese	0.74		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Nickel	0.018 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Potassium	0.58 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:13	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:13	1
Zinc	0.15 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.33		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:15	1
Manganese	0.64		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:15	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		06/12/18 16:35	06/13/18 13:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:53	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		06/12/18 14:05	06/14/18 07:28	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	B	0.018	0.0059	mg/Kg	✉	06/08/18 16:15	06/12/18 17:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.54	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.2		0.20	0.20	SU			06/12/18 14:44	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

Date Collected: 06/05/18 08:10

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-2**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0087	J	0.016	0.0072	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Bromomethane	<0.0016 *		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Carbon disulfide	<0.00086		0.0041	0.00086	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Carbon tetrachloride	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chlorobenzene	<0.00061		0.0016	0.00061	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloroethane	<0.0012 *		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Chloromethane	<0.0017		0.0041	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
cis-1,3-Dichloropropene	<0.00050		0.0016	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Dibromochloromethane	<0.00054		0.0016	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1-Dichloroethene	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloropropane	<0.00043		0.0016	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,3-Dichloropropene, Total	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Ethylbenzene	<0.00079		0.0016	0.00079	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Styrene	<0.00050		0.0016	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0016	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Tetrachloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Toluene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
trans-1,2-Dichloroethene	<0.00073		0.0016	0.00073	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
trans-1,3-Dichloropropene	<0.00058		0.0016	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
1,1,2-Trichloroethane	<0.00071		0.0016	0.00071	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Trichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Vinyl chloride	<0.00073		0.0016	0.00073	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	06/06/18 09:41	06/18/18 23:25	1
Dibromofluoromethane	106		75 - 126	06/06/18 09:41	06/18/18 23:25	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	06/06/18 09:41	06/18/18 23:25	1
Toluene-d8 (Surr)	110		75 - 124	06/06/18 09:41	06/18/18 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[a]anthracene	<0.0054		0.040	0.0054	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[b]fluoranthene	<0.0086		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[g,h,i]perylene	<0.013		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Chrysene	<0.011		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrophenol	<0.70		0.81	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluoranthene	<0.0074		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Indeno[1,2,3-cd]pyrene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylnaphthalene	<0.0073		0.081	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pentachlorophenol	<0.64		0.81	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenanthrene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
Pyrene	<0.0079		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:24	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			06/12/18 07:02	06/13/18 20:24	1
2-Fluorophenol		123		46 - 133			06/12/18 07:02	06/13/18 20:24	1
Nitrobenzene-d5		93		41 - 120			06/12/18 07:02	06/13/18 20:24	1
Phenol-d5		112		46 - 125			06/12/18 07:02	06/13/18 20:24	1
Terphenyl-d14		108		35 - 160			06/12/18 07:02	06/13/18 20:24	1
2,4,6-Tribromophenol		78		25 - 139			06/12/18 07:02	06/13/18 20:24	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.23		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Arsenic	5.1		0.58	0.20	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Barium	70		0.58	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Beryllium	0.79		0.23	0.054	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Chromium	20		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Cobalt	12		0.29	0.076	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Copper	17		0.58	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Iron	20000	B	12	6.1	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Lead	16		0.29	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Magnesium	4400	B	5.8	2.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Calcium	2600	B	12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Manganese	410		0.58	0.084	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Nickel	27		0.58	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Selenium	1.1		0.58	0.34	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Silver	0.32		0.29	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Thallium	<0.29		0.58	0.29	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Vanadium	31		0.29	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Zinc	60		1.2	0.51	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Potassium	2000		29	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1
Sodium	550		58	8.6	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Barium	0.14	J	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1
Cadmium	0.0020	J	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:17	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B04 (0-3)**

**Lab Sample ID: 500-146450-2**

Date Collected: 06/05/18 08:10

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	49		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Copper	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Iron	0.59		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:17	1
Magnesium	14		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Manganese	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Nickel	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Potassium	0.67 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:17	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:17	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:17	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		06/12/18 16:35	06/13/18 13:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:54	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		06/12/18 14:05	06/14/18 07:29	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:03	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.58	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.0		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

Date Collected: 06/05/18 08:35

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-3**

Matrix: Solid

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	J	0.017	0.0072	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Benzene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Butanone (MEK)	<0.0018		0.0042	0.0018	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chlorobenzene	<0.00061		0.0017	0.00061	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Dibromochloromethane	<0.00054		0.0017	0.00054	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,3-Dichloropropene, Total	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
trans-1,3-Dichloropropene	<0.00058		0.0017	0.00058	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
1,1,2-Trichloroethane	<0.00071		0.0017	0.00071	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl acetate	<0.0014		0.0042	0.0014	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	⊗	06/06/18 09:41	06/18/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		75 - 131	06/06/18 09:41	06/18/18 23:53	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/18/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	06/06/18 09:41	06/18/18 23:53	1
Toluene-d8 (Surr)	111		75 - 124	06/06/18 09:41	06/18/18 23:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0068		0.037	0.0068	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Acenaphthylene	<0.0050		0.037	0.0050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Anthracene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Benzo[a]anthracene</b>	<b>0.098</b>		0.037	0.0051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.12		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[b]fluoranthene	0.19		0.037	0.0081	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[g,h,i]perylene	0.082		0.037	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Benzo[k]fluoranthene	0.052		0.037	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethoxy)methane	<0.038		0.19	0.038	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-chloroethyl)ether	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Bis(2-ethylhexyl) phthalate	<0.069		0.19	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Bromophenyl phenyl ether	<0.050		0.19	0.050	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Butyl benzyl phthalate	<0.072		0.19	0.072	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Carbazole	0.12 J		0.19	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloroaniline	<0.18		0.76	0.18	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chloro-3-methylphenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chloronaphthalene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Chlorophenol	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Chlorophenyl phenyl ether	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Chrysene	0.13		0.037	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenz(a,h)anthracene	0.021 J		0.037	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dibenzofuran	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2-Dichlorobenzene	<0.045		0.19	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,3-Dichlorobenzene	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,4-Dichlorobenzene	<0.048		0.19	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3,3'-Dichlorobenzidine	<0.053 *		0.19	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dichlorophenol	<0.090		0.37	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Diethyl phthalate	<0.064		0.19	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dimethylphenol	<0.14		0.37	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Dimethyl phthalate	<0.049		0.19	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-butyl phthalate	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4,6-Dinitro-2-methylphenol	<0.30		0.76	0.30	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrophenol	<0.66		0.76	0.66	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4-Dinitrotoluene	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,6-Dinitrotoluene	<0.074		0.19	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Di-n-octyl phthalate	<0.061		0.19	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluoranthene	0.21		0.037	0.0070	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Fluorene	<0.0053		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobenzene	<0.0087		0.076	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorobutadiene	<0.059		0.19	0.059	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachlorocyclopentadiene	<0.22		0.76	0.22	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Hexachloroethane	<0.057		0.19	0.057	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Indeno[1,2,3-cd]pyrene	0.076		0.037	0.0098	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Isophorone	<0.042		0.19	0.042	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylnaphthalene	0.0082 J		0.076	0.0069	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Methylphenol	<0.060		0.19	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3 & 4 Methylphenol	<0.063		0.19	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Naphthalene	<0.0058		0.037	0.0058	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitroaniline	<0.051		0.19	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
3-Nitroaniline	<0.12		0.37	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
4-Nitroaniline	<0.16		0.37	0.16	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene	<0.0094		0.037	0.0094	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2-Nitrophenol	<0.089		0.37	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

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	<0.36		0.76	0.36	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodi-n-propylamine	<0.046		0.076	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
N-Nitrosodiphenylamine	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,2'-oxybis[1-chloropropane]	<0.044		0.19	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Pentachlorophenol	<0.60		0.76	0.60	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Phenanthrene</b>	<b>0.071</b>		0.037	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
Phenol	<0.084		0.19	0.084	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
<b>Pyrene</b>	<b>0.18</b>		0.037	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
1,2,4-Trichlorobenzene	<0.041		0.19	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,5-Trichlorophenol	<0.086		0.37	0.086	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	1
2,4,6-Trichlorophenol	<0.13		0.37	0.13	mg/Kg	⊗	06/12/18 07:02	06/13/18 20:51	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				06/12/18 07:02	06/13/18 20:51	1
2-Fluorophenol	116		46 - 133				06/12/18 07:02	06/13/18 20:51	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 20:51	1
Phenol-d5	109		46 - 125				06/12/18 07:02	06/13/18 20:51	1
Terphenyl-d14	104		35 - 160				06/12/18 07:02	06/13/18 20:51	1
2,4,6-Tribromophenol	80		25 - 139				06/12/18 07:02	06/13/18 20:51	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.31</b>	<b>J</b>	1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Arsenic</b>	<b>6.7</b>		0.57	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Barium</b>	<b>62</b>		0.57	0.065	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Beryllium</b>	<b>0.61</b>		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cadmium</b>	<b>0.51</b>	<b>B</b>	0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Chromium</b>	<b>19</b>		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Cobalt</b>	<b>9.1</b>		0.28	0.075	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Copper</b>	<b>31</b>		0.57	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Iron</b>	<b>16000</b>	<b>B</b>	11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Lead</b>	<b>200</b>		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Magnesium</b>	<b>10000</b>	<b>B</b>	5.7	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Calcium</b>	<b>15000</b>	<b>B</b>	11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Manganese</b>	<b>370</b>		0.57	0.083	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Nickel</b>	<b>21</b>		0.57	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Selenium</b>	<b>1.0</b>		0.57	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Silver</b>	<b>0.28</b>		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
Thallium	<0.28		0.57	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Vanadium</b>	<b>23</b>		0.28	0.067	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Zinc</b>	<b>100</b>		1.1	0.50	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Potassium</b>	<b>1600</b>		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1
<b>Sodium</b>	<b>460</b>		57	8.4	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Barium</b>	<b>0.28</b>	<b>J</b>	0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1
<b>Cadmium</b>	<b>0.0040</b>	<b>J</b>	0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:22	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B03 (0-3)**

**Lab Sample ID: 500-146450-3**

Date Collected: 06/05/18 08:35

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:22	1
Lead	0.034		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:22	1
Magnesium	90		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Manganese	0.91		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:22	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:22	1
Zinc	0.086 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:22	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		06/12/18 15:23	06/14/18 00:23	1
Manganese	0.42		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:23	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		06/12/18 16:35	06/13/18 13:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:55	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		06/12/18 14:05	06/14/18 07:31	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086 B		0.018	0.0061	mg/Kg	✉	06/08/18 16:15	06/12/18 17:05	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.57	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	8.4		0.20	0.20	SU			06/12/18 14:45	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

Date Collected: 06/05/18 08:55

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-4**

Matrix: Solid

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0093	J	0.016	0.0071	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Benzene	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromodichloromethane	<0.00033		0.0016	0.00033	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromoform	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Bromomethane	<0.0015	*	0.0041	0.0015	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Butanone (MEK)	<0.0018		0.0041	0.0018	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon disulfide	<0.00085		0.0041	0.00085	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Carbon tetrachloride	<0.00047		0.0016	0.00047	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chlorobenzene	<0.00060		0.0016	0.00060	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroethane	<0.0012	*	0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloroform	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Chloromethane	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,2-Dichloroethene	<0.00046		0.0016	0.00046	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
cis-1,3-Dichloropropene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Dibromochloromethane	<0.00053		0.0016	0.00053	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethane	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloroethane	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1-Dichloroethene	<0.00056		0.0016	0.00056	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,2-Dichloropropane	<0.00042		0.0016	0.00042	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,3-Dichloropropene, Total	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Ethylbenzene	<0.00078		0.0016	0.00078	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
2-Hexanone	<0.0013		0.0041	0.0013	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methylene Chloride	<0.0016		0.0041	0.0016	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0041	0.0012	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Methyl tert-butyl ether	<0.00048		0.0016	0.00048	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Styrene	<0.00049		0.0016	0.00049	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2,2-Tetrachloroethane	<0.00052		0.0016	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Tetrachloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Toluene	<0.00041		0.0016	0.00041	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,2-Dichloroethene	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
trans-1,3-Dichloropropene	<0.00057		0.0016	0.00057	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,1-Trichloroethane	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
1,1,2-Trichloroethane	<0.00070		0.0016	0.00070	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Trichloroethene	<0.00055		0.0016	0.00055	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl acetate	<0.0014		0.0041	0.0014	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Vinyl chloride	<0.00072		0.0016	0.00072	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1
Xylenes, Total	<0.00052		0.0033	0.00052	mg/Kg	⊗	06/06/18 09:41	06/19/18 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131			1
Dibromofluoromethane	105		75 - 126			1
1,2-Dichloroethane-d4 (Surr)	109		70 - 134			1
Toluene-d8 (Surr)	112		75 - 124			1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[a]anthracene	0.013	J	0.040	0.0054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.017	J	0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[b]fluoranthene	0.021	J	0.040	0.0087	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[g,h,i]perylene	0.013	J	0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Benzo[k]fluoranthene	<0.012		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Bis(2-ethylhexyl) phthalate	<0.074		0.20	0.074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Butyl benzyl phthalate	<0.077		0.20	0.077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Carbazole	<0.10		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloroaniline	<0.19		0.81	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chloronaphthalene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Chlorophenol	<0.069		0.20	0.069	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Chrysene</b>	<b>0.017</b>	<b>J</b>	0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenz(a,h)anthracene	<0.0078		0.040	0.0078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,4-Dichlorobenzene	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dichlorophenol	<0.096		0.40	0.096	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Dimethyl phthalate	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4,6-Dinitro-2-methylphenol	<0.32		0.81	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrophenol	<0.71		0.81	0.71	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4-Dinitrotoluene	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,6-Dinitrotoluene	<0.079		0.20	0.079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Di-n-octyl phthalate	<0.066		0.20	0.066	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Fluoranthene</b>	<b>0.021</b>	<b>J</b>	0.040	0.0075	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Fluorene	<0.0057		0.040	0.0057	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobenzene	<0.0093		0.081	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachlorocyclopentadiene	<0.23		0.81	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.010</b>	<b>J</b>	0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylnaphthalene	<0.0074		0.081	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Methylphenol	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Naphthalene	<0.0062		0.040	0.0062	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2-Nitrophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55

Matrix: Solid

Date Received: 06/05/18 18:30

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.38		0.81	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodi-n-propylamine	<0.049		0.081	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
N-Nitrosodiphenylamine	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,2'-oxybis[1-chloropropane]	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Pentachlorophenol	<0.65		0.81	0.65	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Phenanthrene</b>	<b>0.0078 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
Phenol	<0.090		0.20	0.090	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
<b>Pyrene</b>	<b>0.019 J</b>		0.040	0.0080	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,5-Trichlorophenol	<0.092		0.40	0.092	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:19	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	98			44 - 121			06/12/18 07:02	06/13/18 21:19	1
2-Fluorophenol	120			46 - 133			06/12/18 07:02	06/13/18 21:19	1
Nitrobenzene-d5	91			41 - 120			06/12/18 07:02	06/13/18 21:19	1
Phenol-d5	109			46 - 125			06/12/18 07:02	06/13/18 21:19	1
Terphenyl-d14	109			35 - 160			06/12/18 07:02	06/13/18 21:19	1
2,4,6-Tribromophenol	81			25 - 139			06/12/18 07:02	06/13/18 21:19	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.38 J</b>		1.2	0.23	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Arsenic</b>	<b>6.2</b>		0.60	0.21	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Barium</b>	<b>81</b>		0.60	0.069	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Beryllium</b>	<b>0.53</b>		0.24	0.056	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cadmium</b>	<b>0.36 B</b>		0.12	0.022	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Chromium</b>	<b>13</b>		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Cobalt</b>	<b>16</b>		0.30	0.079	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Copper</b>	<b>22</b>		0.60	0.17	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Iron</b>	<b>18000 B</b>		12	6.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Lead</b>	<b>30</b>		0.30	0.14	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Magnesium</b>	<b>19000 B</b>		6.0	3.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Calcium</b>	<b>30000 B</b>		12	2.0	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Manganese</b>	<b>870</b>		0.60	0.087	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Nickel</b>	<b>30</b>		0.60	0.18	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Selenium</b>	<b>0.79</b>		0.60	0.35	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Silver</b>	<b>0.27 J</b>		0.30	0.078	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
Thallium	<0.30		0.60	0.30	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Vanadium</b>	<b>26</b>		0.30	0.071	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Zinc</b>	<b>46</b>		1.2	0.53	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1
<b>Sodium</b>	<b>250</b>		60	8.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
<b>Barium</b>	<b>0.28 J</b>		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1
<b>Cadmium</b>	<b>0.0039 J</b>		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:26	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B02 (0-3)**

**Lab Sample ID: 500-146450-4**

Date Collected: 06/05/18 08:55  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	270		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Copper	0.012 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Iron	<0.20		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:26	1
Lead	0.015		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:26	1
Magnesium	140		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Manganese	1.1		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Nickel	0.016 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Potassium	1.0 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:26	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:26	1
Zinc	<0.020		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.17		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:35	1
Manganese	0.36		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:35	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		06/12/18 16:35	06/13/18 13:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:56	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		06/12/18 14:05	06/14/18 07:33	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	B	0.020	0.0066	mg/Kg	✉	06/08/18 16:15	06/12/18 17:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.20		0.59	0.20	mg/Kg	✉	06/15/18 18:05	06/16/18 14:01	1
pH	7.8		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

Date Collected: 06/05/18 09:15

Date Received: 06/05/18 18:30

**Lab Sample ID: 500-146450-5**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0073		0.017	0.0073	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Benzene	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromodichloromethane	<0.00034		0.0017	0.00034	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromoform	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Bromomethane	<0.0016 *		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Butanone (MEK)	<0.0019		0.0042	0.0019	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon disulfide	<0.00087		0.0042	0.00087	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Carbon tetrachloride	<0.00048		0.0017	0.00048	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chlorobenzene	<0.00062		0.0017	0.00062	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroethane	<0.0012 *		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloroform	<0.00058		0.0017	0.00058	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Chloromethane	<0.0017		0.0042	0.0017	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,2-Dichloroethene	<0.00047		0.0017	0.00047	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
cis-1,3-Dichloropropene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Dibromochloromethane	<0.00055		0.0017	0.00055	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethane	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1-Dichloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloropropane	<0.00043		0.0017	0.00043	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,3-Dichloropropene, Total	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Ethylbenzene	<0.00080		0.0017	0.00080	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
2-Hexanone	<0.0013		0.0042	0.0013	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methylene Chloride	<0.0016		0.0042	0.0016	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
4-Methyl-2-pentanone (MIBK)	<0.0012		0.0042	0.0012	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Methyl tert-butyl ether	<0.00049		0.0017	0.00049	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Styrene	<0.00050		0.0017	0.00050	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2,2-Tetrachloroethane	<0.00053		0.0017	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Tetrachloroethene	<0.00057		0.0017	0.00057	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Toluene	<0.00042		0.0017	0.00042	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,2-Dichloroethene	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
trans-1,3-Dichloropropene	<0.00059		0.0017	0.00059	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,1-Trichloroethane	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
1,1,2-Trichloroethane	<0.00072		0.0017	0.00072	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Trichloroethene	<0.00056		0.0017	0.00056	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl acetate	<0.0015		0.0042	0.0015	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Vinyl chloride	<0.00074		0.0017	0.00074	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1
Xylenes, Total	<0.00053		0.0033	0.00053	mg/Kg	☀	06/06/18 09:41	06/19/18 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 131	06/06/18 09:41	06/19/18 00:48	1
Dibromofluoromethane	108		75 - 126	06/06/18 09:41	06/19/18 00:48	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	06/06/18 09:41	06/19/18 00:48	1
Toluene-d8 (Surr)	113		75 - 124	06/06/18 09:41	06/19/18 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0072		0.040	0.0072	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Acenaphthylene	<0.0053		0.040	0.0053	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Anthracene	<0.0067		0.040	0.0067	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1
Benzo[a]anthracene	0.036 J		0.040	0.0054	mg/Kg	☀	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15

Matrix: Solid

Date Received: 06/05/18 18:30

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	0.045		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[b]fluoranthene	0.060		0.040	0.0086	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[g,h,i]perylene	0.025 J		0.040	0.013	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Benzo[k]fluoranthene	0.018 J		0.040	0.012	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethoxy)methane	<0.041		0.20	0.041	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-chloroethyl)ether	<0.060		0.20	0.060	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Bis(2-ethylhexyl) phthalate	<0.073		0.20	0.073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Bromophenyl phenyl ether	<0.053		0.20	0.053	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Butyl benzyl phthalate	<0.076		0.20	0.076	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Carbazole	0.12 J		0.20	0.10	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloroaniline	<0.19		0.80	0.19	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chloro-3-methylphenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chloronaphthalene	<0.044		0.20	0.044	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Chlorophenol	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Chlorophenyl phenyl ether	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Chrysene	0.049		0.040	0.011	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenz(a,h)anthracene	<0.0077		0.040	0.0077	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dibenzofuran	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2-Dichlorobenzene	<0.048		0.20	0.048	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,3-Dichlorobenzene	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,4-Dichlorobenzene	<0.051		0.20	0.051	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3,3'-Dichlorobenzidine	<0.056 *		0.20	0.056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dichlorophenol	<0.095		0.40	0.095	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Diethyl phthalate	<0.068		0.20	0.068	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dimethylphenol	<0.15		0.40	0.15	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Dimethyl phthalate	<0.052		0.20	0.052	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-butyl phthalate	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4,6-Dinitro-2-methylphenol	<0.32		0.80	0.32	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrophenol	<0.70		0.80	0.70	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4-Dinitrotoluene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,6-Dinitrotoluene	<0.078		0.20	0.078	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Di-n-octyl phthalate	<0.065		0.20	0.065	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluoranthene	0.070		0.040	0.0074	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Fluorene	<0.0056		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobenzene	<0.0093		0.080	0.0093	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorobutadiene	<0.063		0.20	0.063	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachlorocyclopentadiene	<0.23		0.80	0.23	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Hexachloroethane	<0.061		0.20	0.061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Indeno[1,2,3-cd]pyrene	0.022 J		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Isophorone	<0.045		0.20	0.045	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylnaphthalene	<0.0073		0.080	0.0073	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Methylphenol	<0.064		0.20	0.064	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3 & 4 Methylphenol	<0.067		0.20	0.067	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Naphthalene	<0.0061		0.040	0.0061	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitroaniline	<0.054		0.20	0.054	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
3-Nitroaniline	<0.12		0.40	0.12	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
4-Nitroaniline	<0.17		0.40	0.17	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene	<0.010		0.040	0.010	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2-Nitrophenol	<0.094		0.40	0.094	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

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	<0.38		0.80	0.38	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodi-n-propylamine	<0.049		0.080	0.049	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
N-Nitrosodiphenylamine	<0.047		0.20	0.047	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,2'-oxybis[1-chloropropane]	<0.046		0.20	0.046	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Pentachlorophenol	<0.64		0.80	0.64	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Phenanthrene</b>	<b>0.030 J</b>		0.040	0.0056	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
Phenol	<0.089		0.20	0.089	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
<b>Pyrene</b>	<b>0.065</b>		0.040	0.0079	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
1,2,4-Trichlorobenzene	<0.043		0.20	0.043	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,5-Trichlorophenol	<0.091		0.40	0.091	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	1
2,4,6-Trichlorophenol	<0.14		0.40	0.14	mg/Kg	⊗	06/12/18 07:02	06/13/18 21:46	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				06/12/18 07:02	06/13/18 21:46	1
2-Fluorophenol	120		46 - 133				06/12/18 07:02	06/13/18 21:46	1
Nitrobenzene-d5	92		41 - 120				06/12/18 07:02	06/13/18 21:46	1
Phenol-d5	104		46 - 125				06/12/18 07:02	06/13/18 21:46	1
Terphenyl-d14	103		35 - 160				06/12/18 07:02	06/13/18 21:46	1
2,4,6-Tribromophenol	81		25 - 139				06/12/18 07:02	06/13/18 21:46	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.22		1.1	0.22	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
<b>Arsenic</b>	<b>5.2</b>		0.56	0.19	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Barium	56		0.56	0.064	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Beryllium	0.65		0.23	0.053	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Cadmium	0.36 B		0.11	0.020	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Chromium	17		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Cobalt	9.0		0.28	0.074	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Copper	23		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Iron	16000 B		11	5.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Lead	47		0.28	0.13	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Magnesium	4400 B		5.6	2.8	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Calcium	3900 B		11	1.9	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Manganese	300		0.56	0.082	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Nickel	25		0.56	0.16	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Selenium	0.68		0.56	0.33	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Silver	0.24 J		0.28	0.073	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Thallium	<0.28		0.56	0.28	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Vanadium	25		0.28	0.066	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Zinc	64		1.1	0.49	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Potassium	1700		28	10	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1
Sodium	390		56	8.3	mg/Kg	⊗	06/07/18 08:45	06/08/18 05:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
Barium	0.27 J		0.50	0.050	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1
Cadmium	0.0046 J		0.0050	0.0020	mg/L	⊗	06/12/18 16:35	06/13/18 22:30	1

TestAmerica Chicago

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

**Client Sample ID: 2409V-1-B01 (0-3)**

**Lab Sample ID: 500-146450-5**

Date Collected: 06/05/18 09:15  
Date Received: 06/05/18 18:30

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		5.0	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Chromium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Cobalt	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Copper	0.014 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Iron	0.38 J		0.40	0.20	mg/L		06/12/18 16:35	06/13/18 22:30	1
Lead	0.016		0.0075	0.0075	mg/L		06/12/18 16:35	06/13/18 22:30	1
Magnesium	46		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Manganese	0.30		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Nickel	0.015 J		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Potassium	1.3 J		2.5	0.50	mg/L		06/12/18 16:35	06/13/18 22:30	1
Selenium	<0.020		0.050	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1
Silver	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Vanadium	<0.010		0.025	0.010	mg/L		06/12/18 16:35	06/13/18 22:30	1
Zinc	0.073 J		0.50	0.020	mg/L		06/12/18 16:35	06/13/18 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.32		0.0075	0.0075	mg/L		06/12/18 15:23	06/14/18 00:39	1
Manganese	0.78		0.025	0.010	mg/L		06/12/18 15:23	06/14/18 00:39	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		06/12/18 16:35	06/13/18 13:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/12/18 16:35	06/13/18 13:57	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		06/12/18 14:05	06/14/18 07:34	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083 B		0.018	0.0060	mg/Kg	✉	06/08/18 16:15	06/12/18 17:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.19		0.55	0.19	mg/Kg	✉	06/15/18 18:05	06/16/18 14:02	1
pH	7.6		0.20	0.20	SU			06/12/18 14:46	1

TestAmerica Chicago

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: IDOT - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control 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
*	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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	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 - Morton Grove - WO 049

TestAmerica Job ID: 500-146450-1

## 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	04-30-19

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
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

1

2

3

4

5

6

7

8

9

10

# TestAmerica

THE LEADER IN ENVIRONMENTAL



2417 Bond Street, University Park, IL 604  
Phone: 708.534.5200 Fax: 708.534.

500-146450 900

#### **Turnaround Time Required (Business Days)**

1 Day     2 Days     5 Days     7 Days     10 Days     15 Days     Other

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

Relinquished By <i>Perry</i>	Company Terraco	Date 6/05/18	Time 1615	Received By <i>Perry</i>	Company TAL	Date 6-5-18	Time 1645	Lab Courier <i>PA</i>
Relinquished By <i>O Hira</i>	Company TAL	Date 6-5-18	Time 1830	Received By <i>Shinobu</i>	Company TACI	Date 6/6/18	Time 0805	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key	Client Comments	Lab Comments:
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	No Aluminum SPLP As directed by Terracon

## ***Chain of Custody Record***

Lab Job #: 500-146450

**Chain of Custody Number:**

Page \_\_\_\_\_ of \_\_\_\_\_

Page        of

Temperature °C of Cooler: 23, 54, 55, 65, 66

- Preservative Key

  1. HCl, Cool to 4°
  2. H<sub>2</sub>SO<sub>4</sub>, Cool to 4°
  3. HNO<sub>3</sub>, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO<sub>4</sub>
  7. Cool to 4°
  8. None
  9. Other

## Comments

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 500-146450-1

**Login Number: 146450**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	2.3,5.4,5.1,5.6
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 <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	