September 28, 2018
File No. 25217027.01

Ms. Jennifer Dorman
Wisconsin Department of Natural Resources
2300 N Dr. Martin Luther King Dr.
Milwaukee, WI 53212-3128

Subject: Groundwater Sampling Results
Highland Plaza, 8530-8600 W. Brown Deer Rd., Milwaukee
BRRTS No. 02-41-579065

Dear Ms. Dorman:

On behalf of RJR ML, LLC (RJR), we have enclosed groundwater sampling results for the above-noted Highland Plaza case. The groundwater samples were collected on September 4, 2018. We notified RJR of the results on September 18, 2018.

The sample results are consistent with prior sampling results. There were no NR 140 enforcement standard exceedances. Tetrachloroethylene (PCE) was detected in the MW2 sample at a concentration in excess of the NR 140 preventive action limit.

There do not appear to be other affected owners or tenants. The dry cleaner unit and neighboring units are currently vacant.

Sincerely,

Robert Langdon
Senior Project Manager
SCS Engineers

Thomas J. Karwoski, PG
Vice President
SCS Engineers

REL/lmh/TK

cc: Binyoti Amungwafor, WDNR (email)
Symeon Davis, RJR ML, LLC (email)

Encl. Table 2 – Groundwater Analytical Results Summary
Figure 2 – Site Plan
TestAmerica Laboratory Report dated September 15, 2018

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Table 2. Groundwater Analytical Results Summary
Highland Plaza, Milwaukee, WI / SCS Engineers Project #25217027.01
(Results are in µg/L)

Sample	Date	Lab Notes	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethylene	Tetrachloroethylene (PCE)	Trichloroethylene (TCE)	Vinyl Chloride	Other VOCs	
MW-2	6/12/2017	(1)	<0.41	<0.35	*0.69* J	<0.16	<0.20	ND	
	9/4/2018	--	<0.41	<0.35	*1.1*	<0.16	<0.20	ND	
MW-3	6/12/2017	(1)	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
	9/4/2018	--	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
	9/4/2018 (Dup)	--	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
MW-4	6/12/2017	(1)	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
	9/4/2018	--	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
Trip Blank	6/12/2017	(1)	<0.41	<0.35	<0.37	<0.16	<0.20	Toluene	0.38 J
	9/4/2018	--	<0.41	<0.35	<0.37	<0.16	<0.20	ND	
NR 140 Enforcement Standards			70	100	5	5	0.2	Toluene	800
NR 140 Preventive Action Limits			7	20	0.5	0.5	0.02	Toluene	160

Abbreviations:
µg/L = micrograms per liter or parts per billion (ppb) ND = None Detected DUP = Duplicate Sample

Notes:

NR 140 Enforcement Standards - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.
NR 140 Preventive Action Limits - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.
Bold+underlined values meet or exceed NR 140 enforcement standards.
Italic+underlined values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
(1) Naphthalene - LCS or LCSD is outside acceptance limits.

Created by: JSN Date: 6/19/2017
Last revision by: LMH Date: 9/17/2018
Checked by: JSN Date: 9/17/2018

I:\25217027.01\Correspondence\180928_Dorman_GW Results_Attachments\[Table 2 Groundwater VOCs.xlsx.xls]GW VOCs

200 0 200 **SITE OVERVIEW**

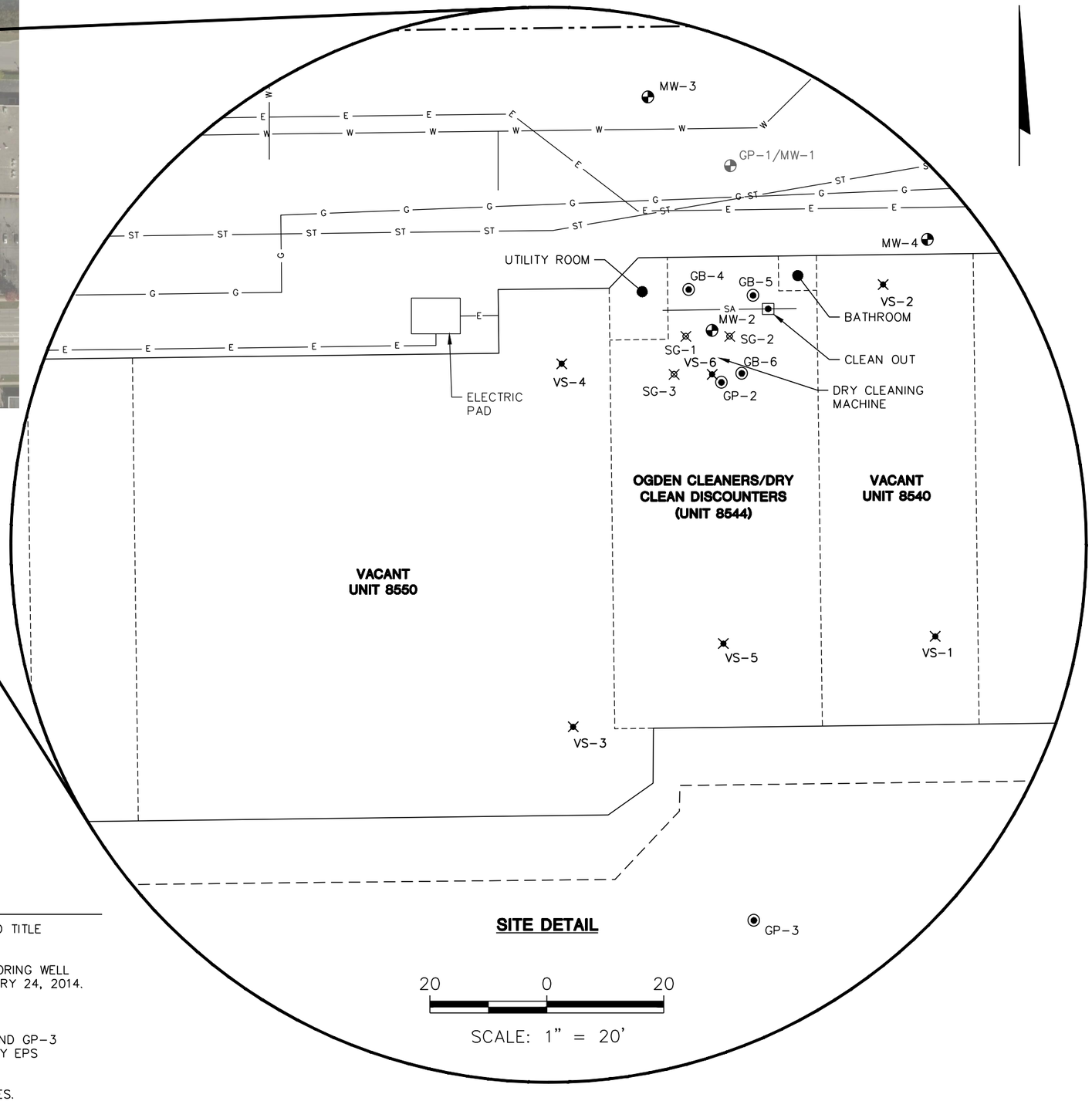
SCALE: 1" = 200'

LEGEND

- PROPERTY LINE
- BUILDING OVERHANG
- INTERIOR BUILDING UNIT DIVISION
- E — BURIED ELECTRIC
- G — GAS MAIN
- SA — SANITARY SEWER
- ST — STORM SEWER
- W — WATER
- SUB-SLAB VAPOR PROBE (INSTALLED BY SCS ENGINEERS, JANUARY 2017)
- SUB-SLAB VAPOR PROBE (INSTALLED BY EDI CONSULTANTS, OCTOBER 2016)
- SOIL BORING
- MONITORING WELL
- ABANDONED MONITORING WELL

NOTES:

1. PROPERTY LINE AND BUILDING LOCATIONS ARE APPROXIMATE, BASED ON ALTA/ACSM LAND TITLE SURVEY BY NATIONAL SURVEY & ENGINEERING, DATED JUNE 5, 2006.
2. INTERIOR BUILDING DIVISIONS ARE APPROXIMATE, BASED ON FIGURE 1, BORING AND MONITORING WELL LOCATION MAP PREPARED BY EPS ENVIRONMENTAL SERVICES, CHICAGO, IL, DATED FEBRUARY 24, 2014.
3. SUB-SLAB VAPOR PROBE LOCATIONS ARE APPROXIMATE.
4. SOIL BORING AND MONITORING WELL LOCATIONS ARE APPROXIMATE. GP-1/MW-1, GP-2, AND GP-3 BORING LOCATIONS BASED ON BORING AND MONITORING WELL LOCATION MAP PREPARED BY EPS ENVIRONMENTAL SERIVCES, INC., FEBRUARY 24, 2014.
5. UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD NOT BE USED FOR LOCATING PURPOSES.



SITE PLAN

FIGURE 2

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

ENGINEER

KP

DRAWN BY: REL 07/25/17

CHECKED BY:

APPROVED BY:

SITE

HIGHLAND PLAZA
8600 WEST BROWN DEER ROAD
MILWAUKEE, WISCONSIN

CLIENT

RJR ML, LLC.
1180 SOUTH BEVERLY DRIVE, SUITE 700
LOS ANGELES, CA 90035
(424) 284-7784

PROJECT NO. 25217027.01

DRAWN: 02/09/17

REVISED: 06/22/17

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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: 500-150948-1
Client Project/Site: Highland Plaza - 25217027

For:
SCS Engineers
2830 Dairy Dr
Madison, Wisconsin 53718

Attn: Mr. Robert Langdon

Sandie Fredrick

Authorized for release by:
9/15/2018 9:01:17 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Job ID: 500-150948-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-150948-1

Comments
No additional comments.

Receipt
The samples were received on 9/5/2018 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

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

Detection Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW02 — Lab Sample ID: 500-150948-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.1		1.0	0.37	ug/L	1		8260B	Total/NA

Client Sample ID: MW03 — Lab Sample ID: 500-150948-2

No Detections.

Client Sample ID: MW04 — Lab Sample ID: 500-150948-3

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 500-150948-4

No Detections.

Client Sample ID: MW03 DUP — Lab Sample ID: 500-150948-5

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-150948-1	MW02	Water	09/04/18 10:15	09/05/18 09:10
500-150948-2	MW03	Water	09/04/18 09:30	09/05/18 09:10
500-150948-3	MW04	Water	09/04/18 10:00	09/05/18 09:10
500-150948-4	TRIP BLANK	Water	09/04/18 00:00	09/05/18 09:10
500-150948-5	MW03 DUP	Water	09/04/18 09:45	09/05/18 09:10

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW02
Date Collected: 09/04/18 10:15
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 17:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 17:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 17:38	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 17:38	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 17:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 17:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 17:38	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 17:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 17:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 17:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 17:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 17:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 17:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 17:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 17:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 17:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 17:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 17:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 17:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 17:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 17:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 17:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 17:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 17:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 17:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 17:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 17:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 17:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 17:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 17:38	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 17:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 17:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 17:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 17:38	1
Tetrachloroethene	**1.1**		1.0	0.37	ug/L			09/12/18 17:38	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 17:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 17:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1

Client Sample ID: MW02

Date Collected: 09/04/18 10:15
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 17:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 17:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 17:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 17:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 17:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 17:38	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 17:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 17:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 17:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 17:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*09/12/18 17:38*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*09/12/18 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*09/12/18 17:38*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*09/12/18 17:38*	*1*

Client Sample ID: MW03

Date Collected: 09/04/18 09:30
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 18:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 18:05	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 18:05	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 18:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 18:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 18:05	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 18:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 18:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 18:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 18:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 18:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 18:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 18:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 18:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 18:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 18:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 18:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 18:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1

Client Sample ID: MW03
Date Collected: 09/04/18 09:30
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 18:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 18:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 18:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 18:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 18:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 18:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 18:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 18:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 18:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:05	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 18:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 18:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 18:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/12/18 18:05	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 18:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 18:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 18:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 18:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 18:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 18:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 18:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:05	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 18:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 18:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 18:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*09/12/18 18:05*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*09/12/18 18:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*		*09/12/18 18:05*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*09/12/18 18:05*	*1*

Client Sample ID: MW04
Date Collected: 09/04/18 10:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 18:32	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:32	1

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW04
Date Collected: 09/04/18 10:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 18:32	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 18:32	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 18:32	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 18:32	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 18:32	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 18:32	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 18:32	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 18:32	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 18:32	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 18:32	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 18:32	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 18:32	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 18:32	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 18:32	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 18:32	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:32	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 18:32	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 18:32	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 18:32	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 18:32	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 18:32	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 18:32	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 18:32	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 18:32	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 18:32	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 18:32	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 18:32	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:32	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 18:32	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:32	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 18:32	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 18:32	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/12/18 18:32	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 18:32	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 18:32	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 18:32	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 18:32	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 18:32	1

Client Sample ID: MW04
Date Collected: 09/04/18 10:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 18:32	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 18:32	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:32	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 18:32	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:32	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 18:32	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 18:32	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*09/12/18 18:32*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*09/12/18 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*		*09/12/18 18:32*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*09/12/18 18:32*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 09/04/18 00:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 18:59	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:59	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 18:59	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 18:59	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 18:59	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 18:59	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 18:59	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 18:59	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 18:59	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 18:59	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 18:59	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 18:59	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 18:59	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 18:59	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 18:59	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 18:59	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 18:59	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:59	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 18:59	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 18:59	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 18:59	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 18:59	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 500-150948-4

Date Collected: 09/04/18 00:00

Matrix: Water

Date Received: 09/05/18 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 18:59	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 18:59	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 18:59	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 18:59	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 18:59	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 18:59	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 18:59	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:59	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 18:59	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 18:59	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 18:59	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 18:59	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/12/18 18:59	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 18:59	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 18:59	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 18:59	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 18:59	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 18:59	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 18:59	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 18:59	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 18:59	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 18:59	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 18:59	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 18:59	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 18:59	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*09/12/18 18:59*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*09/12/18 18:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*09/12/18 18:59*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*09/12/18 18:59*	*1*

Client Sample ID: MW03 DUP

Lab Sample ID: 500-150948-5

Date Collected: 09/04/18 09:45

Matrix: Water

Date Received: 09/05/18 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 19:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 19:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 19:53	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 19:53	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 19:53	1

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW03 DUP
Date Collected: 09/04/18 09:45
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 19:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 19:53	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 19:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 19:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 19:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 19:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 19:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 19:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 19:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 19:53	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 19:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 19:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 19:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 19:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 19:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 19:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 19:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 19:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 19:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 19:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 19:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 19:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 19:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 19:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 19:53	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 19:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 19:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 19:53	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 19:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/12/18 19:53	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 19:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 19:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 19:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 19:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 19:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 19:53	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 19:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 19:53	1

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW03 DUP
Date Collected: 09/04/18 09:45
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 19:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 19:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 19:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 19:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*09/12/18 19:53*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*09/12/18 19:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*09/12/18 19:53*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*09/12/18 19:53*	*1*

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)

QC Association Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

GC/MS VOA

Analysis Batch: 449373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150948-1	MW02	Total/NA	Water	8260B	
500-150948-2	MW03	Total/NA	Water	8260B	
500-150948-3	MW04	Total/NA	Water	8260B	
500-150948-4	TRIP BLANK	Total/NA	Water	8260B	
500-150948-5	MW03 DUP	Total/NA	Water	8260B	
MB 500-449373/6	Method Blank	Total/NA	Water	8260B	
LCS 500-449373/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-150948-1	MW02	97	97	103	92
500-150948-2	MW03	95	97	101	93
500-150948-3	MW04	95	96	101	93
500-150948-4	TRIP BLANK	95	95	102	91
500-150948-5	MW03 DUP	96	96	102	92
LCS 500-449373/4	Lab Control Sample	91	94	95	95
MB 500-449373/6	Method Blank	92	94	96	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 500-449373/6
Matrix: Water
Analysis Batch: 449373

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			09/12/18 11:50	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/12/18 11:50	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/12/18 11:50	1
Bromoform	<0.48		1.0	0.48	ug/L			09/12/18 11:50	1
Bromomethane	<0.80		2.0	0.80	ug/L			09/12/18 11:50	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/12/18 11:50	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/12/18 11:50	1
Chloroform	<0.37		2.0	0.37	ug/L			09/12/18 11:50	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/12/18 11:50	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/12/18 11:50	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/12/18 11:50	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/12/18 11:50	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/12/18 11:50	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/12/18 11:50	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/12/18 11:50	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/12/18 11:50	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/12/18 11:50	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/12/18 11:50	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			09/12/18 11:50	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/12/18 11:50	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/12/18 11:50	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/12/18 11:50	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/12/18 11:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/12/18 11:50	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/12/18 11:50	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/12/18 11:50	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/12/18 11:50	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/12/18 11:50	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/12/18 11:50	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 11:50	1
Styrene	<0.39		1.0	0.39	ug/L			09/12/18 11:50	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/12/18 11:50	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/12/18 11:50	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/12/18 11:50	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/12/18 11:50	1
Toluene	<0.15		0.50	0.15	ug/L			09/12/18 11:50	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/12/18 11:50	1

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

Lab Sample ID: MB 500-449373/6
Matrix: Water
Analysis Batch: 449373

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/12/18 11:50	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/12/18 11:50	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/12/18 11:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/12/18 11:50	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/12/18 11:50	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/12/18 11:50	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			09/12/18 11:50	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/12/18 11:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/12/18 11:50	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/12/18 11:50	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/12/18 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*09/12/18 11:50*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*09/12/18 11:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*		*09/12/18 11:50*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*09/12/18 11:50*	*1*

Lab Sample ID: LCS 500-449373/4
Matrix: Water
Analysis Batch: 449373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.0		ug/L		98	70 - 120
Bromobenzene	50.0	50.2		ug/L		100	70 - 122
Bromochloromethane	50.0	49.4		ug/L		99	65 - 122
Bromodichloromethane	50.0	49.3		ug/L		99	69 - 120
Bromoform	50.0	50.0		ug/L		100	56 - 132
Bromomethane	50.0	39.3		ug/L		79	40 - 152
Carbon tetrachloride	50.0	50.2		ug/L		100	59 - 133
Chlorobenzene	50.0	48.0		ug/L		96	70 - 120
Chloroethane	50.0	46.9		ug/L		94	48 - 136
Chloroform	50.0	51.4		ug/L		103	70 - 120
Chloromethane	50.0	46.0		ug/L		92	56 - 152
2-Chlorotoluene	50.0	48.8		ug/L		98	70 - 125
4-Chlorotoluene	50.0	49.4		ug/L		99	68 - 124
cis-1,2-Dichloroethene	50.0	48.9		ug/L		98	70 - 125
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	64 - 127
Dibromochloromethane	50.0	48.0		ug/L		96	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	44.4		ug/L		89	56 - 123
1,2-Dibromoethane	50.0	50.1		ug/L		100	70 - 125
Dibromomethane	50.0	49.3		ug/L		99	70 - 120
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 125
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 125
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	70 - 120
Dichlorodifluoromethane	50.0	42.6		ug/L		85	40 - 159
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 125

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

Lab Sample ID: LCS 500-449373/4
Matrix: Water
Analysis Batch: 449373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	49.1		ug/L		98	68 - 127
1,1-Dichloroethene	50.0	51.6		ug/L		103	67 - 122
1,2-Dichloropropane	50.0	46.2		ug/L		92	67 - 130
1,3-Dichloropropane	50.0	47.9		ug/L		96	62 - 136
2,2-Dichloropropane	50.0	43.6		ug/L		87	58 - 139
1,1-Dichloropropene	50.0	49.9		ug/L		100	70 - 121
Ethylbenzene	50.0	46.5		ug/L		93	70 - 123
Hexachlorobutadiene	50.0	49.7		ug/L		99	51 - 150
Isopropylbenzene	50.0	48.6		ug/L		97	70 - 126
Methylene Chloride	50.0	51.1		ug/L		102	69 - 125
Methyl tert-butyl ether	50.0	44.0		ug/L		88	55 - 123
Naphthalene	50.0	50.9		ug/L		102	53 - 144
n-Butylbenzene	50.0	50.9		ug/L		102	68 - 125
N-Propylbenzene	50.0	50.3		ug/L		101	69 - 127
p-Isopropyltoluene	50.0	48.7		ug/L		97	70 - 125
sec-Butylbenzene	50.0	49.6		ug/L		99	70 - 123
Styrene	50.0	47.1		ug/L		94	70 - 120
tert-Butylbenzene	50.0	48.3		ug/L		97	70 - 121
1,1,1,2-Tetrachloroethane	50.0	50.3		ug/L		101	70 - 125
1,1,2,2-Tetrachloroethane	50.0	49.7		ug/L		99	62 - 140
Tetrachloroethene	50.0	49.3		ug/L		99	70 - 128
Toluene	50.0	47.3		ug/L		95	70 - 125
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	70 - 125
trans-1,3-Dichloropropene	50.0	47.3		ug/L		95	62 - 128
1,2,3-Trichlorobenzene	50.0	53.9		ug/L		108	51 - 145
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	57 - 137
1,1,1-Trichloroethane	50.0	48.7		ug/L		97	70 - 125
1,1,2-Trichloroethane	50.0	48.7		ug/L		97	71 - 130
Trichloroethene	50.0	50.4		ug/L		101	70 - 125
Trichlorofluoromethane	50.0	52.8		ug/L		106	55 - 128
1,2,3-Trichloropropane	50.0	48.6		ug/L		97	50 - 133
1,2,4-Trimethylbenzene	50.0	48.5		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	50.0	48.9		ug/L		98	70 - 123
Vinyl chloride	50.0	48.6		ug/L		97	64 - 126
Xylenes, Total	100	96.8		ug/L		97	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*
Dibromofluoromethane	*94*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*
Toluene-d8 (Surr)	*95*		*75 - 120*

Lab Chronicle

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Client Sample ID: MW02
Date Collected: 09/04/18 10:15
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449373	09/12/18 17:38	PMF	TAL CHI

Client Sample ID: MW03
Date Collected: 09/04/18 09:30
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449373	09/12/18 18:05	PMF	TAL CHI

Client Sample ID: MW04
Date Collected: 09/04/18 10:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449373	09/12/18 18:32	PMF	TAL CHI

Client Sample ID: TRIP BLANK
Date Collected: 09/04/18 00:00
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449373	09/12/18 18:59	PMF	TAL CHI

Client Sample ID: MW03 DUP
Date Collected: 09/04/18 09:45
Date Received: 09/05/18 09:10

Lab Sample ID: 500-150948-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449373	09/12/18 19:53	PMF	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Highland Plaza - 25217027

TestAmerica Job ID: 500-150948-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

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

500-150948 COC

Chain of Custody Record

Lab Job #: 500-150948

Chain of Custody Number:

Page ____ of ____

Temperature °C of Cooler: 0.9

Client: Rob Langdon
Client Project #: 25217027
Project Name: Highland Plaza
Project Location/State: Menomonee Falls WI
Lab Project #:
Sampler: Zach Watson
Lab PM:

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

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOC's								Comments
							1									
1		MW02	9.4.18 1015		3	W		X								
2		MW03	930					X								
3		MW04	1000					X								
4		TB						X								
5		MW03DUP	945					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
1	Zach Watson	SCS	9.4.18	1045		TA	9.4.18	10:45
2		TA	9.4.18	17:00		TA	9-5-18	0910
3								

Lab Courier
Shipped
Hand Delivered

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

Client Comments

Lab Comments:

9/15/2018

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-150948-1

Login Number: 150948
List Number: 1
Creator: James, Jeff A

List Source: TestAmerica Chicago

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	0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	