FTS Field & Technical Services
200 Third Avenue • Carnegie, PA 15106 • Phone: 412-429-2694 • Fax: 412-279-4512

July 2, 2018

Mr. Chris Saari
Wisconsin Department of Natural Resources
2501 Golf Course Road
Ashland, WI 54806

RE: First Semi-Annual 2018 RCRA Groundwater Monitoring Results
Former Koppers Inc. Superior, Wisconsin Facility
WID 006 179 493

Dear Mr. Saari:

On behalf of Beazer East, Inc. (Beazer), Field & Technical Services, LLC (FTS) is submitting to the Wisconsin Department of Natural Resources (WDNR) the First Semi-Annual 2018 Resource Conservation and Recovery Act (RCRA) Groundwater Monitoring Results for the referenced facility. Appendix A includes one copy of the groundwater monitoring data certification for the subject groundwater monitoring event.

BACKGROUND

Monitoring wells in the vicinity of the closed surface impoundments were sampled and analyzed in accordance with the following documents:

- The Conditional Closure and Long-Term Care Plan Approval (WDNR, October 1, 1987);
- Long-Term Care Plan Approval Modification (October 29, 2002);
- Groundwater Monitoring Sampling and Analysis Plan (April 2002); and
- Wisconsin Administrative Code Chapter NR 664 subchapter (F) (formerly NR 635).

The wells that comprise the currently approved RCRA monitoring well network for the closed surface impoundments are as follows:

W-04AR2	W-06A	W-06C	W-10AR2	W-12A
W-12CR	W-28C	W-30A	W-30C	

Groundwater samples were collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and dioxins and furans from monitoring wells W-04AR2, W-06A, W-06C, W-10AR2, W-12A, W-12CR, W-28C, W-30A, and W-30C during the first semi-annual 2018 event.

In addition to these wells, a groundwater sample was collected and analyzed for SVOCs from monitoring well W-18D in conjunction with this monitoring event. Well W-18D is not a required component of the approved monitoring program, but was sampled at Beazer's discretion above and beyond the requirements of the program.

The locations of the wells included in the groundwater monitoring program are shown on Figure B-1, provided in Appendix B. The subject sampling event was conducted from May 2, 2018 through May 3, 2018. The sampling effort was led by Mr. Brendan Rick, FTS Field Technician.

In accordance with the documents listed above, the following items are included in this report:

- One signed copy of the Groundwater Monitoring Data Certification Statement (Appendix A);
- Well location map (Appendix B);
- Summary of detected constituents and Preventive Action Limit (PAL), Enforcement Standard (ES), and Maximum Contaminant Level (MCL) exceedances (Table 1 of Appendix C);
- Summary of analytical data (Table 2 of Appendix C);
- Data Evaluation Summary (Appendix D);
- A hard copy of the laboratory analytical data, including trip blank, equipment blank, and field duplicate results (Appendix E);
- A hard copy of the printout of the ASCII formatted data (Appendix F); and
- An electronic version of the laboratory analytical data (enclosed CD).

SUMMARY OF ANALYTICAL RESULTS

The detected constituents are summarized and compared to the PALs, ESs, and MCLs in Table 1 of Appendix C. Table 2 in Appendix C summarizes all laboratory analytical data. As indicated in Table 1 of Appendix C, exceedances of the PALs, ESs, and MCLs were noted for the following parameters and wells:

Parameter	Regulatory Standard (ug/L)	Wells
MCL Exceedance		
Benzene	5	W-10AR2, W-30A
ES Exceedance		
Benzene	5	W-10AR2, W-30A
PAL Exceedance		
Benzene	0.5	W-10AR2, W-30A
Naphthalene	10	W-30A
2,3,7,8-TCDD TEQ*	3E-06	W-04AR2, W-30A

* At the request of WDNR, 2,3,7,8-TCDD TEQ values are compared to the congener-specific PAL and ES for 2,3,7,8-TCDD.

Based on these results, three wells (W-04AR2, W-10AR2, and W-30A) had concentrations of one or more constituents above a regulatory standard. The Groundwater Monitoring Data Certification form, provided as Appendix A, indicates that some of the data associated with the first semi-annual 2018 sampling event exceeded the Wisconsin PALs and ESs.

The data evaluation performed by FTS for the first semi-annual 2018 sampling event (Appendix D) indicated that certain data required qualification. However, the overall data quality was acceptable.

In general, the groundwater standard exceedances should continue to be viewed in light of the ongoing Site-wide RCRA corrective action program and the approved natural attenuation remedy for groundwater. Therefore, in reviewing the first semi-annual 2018 data in reference to NR 140.24 and NR 140.26, no additional action beyond continued monitoring is necessary.

If you should have any questions regarding this correspondence, please do not hesitate to contact Ms. Jane Patarcity of Beazer at 412-208-8813 or Ms. Angela Gatchie of FTS at 412-428-9411.

Sincerely,

Field & Technical Services LLC

Angela Gatchie
Project Scientist

Attachments (Original Report and electronic copy)

cc: J. Patarcity, Beazer (electronic copy only)
L. Paul, Koppers (electronic copy only)
D. Bessingpas, ARCADIS (.pdf transmittal)
D. Panofsky, WDNR
GEMS Database, WDNR
T. Peterson, TRP Properties, LLC

APPENDIX A

GROUNDWATER MONITORING DATA CERTIFICATION

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a), NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Field & Technical Services, LLC

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Angela Gatchie Phone: (412) 428-9411

E-mail: agatchie.2006@f-ts.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Former Koppers, Inc. Facility	03046		May 2 - May 3, 2018

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

May 2018

Type of Data Submitted (Check all that apply)

- [X] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [X] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Jane Patarcity	Manager, Environmental Svcs.	(412) 208-8813
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Signature 6-29-18 Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

APPENDIX B

WELL LOCATION MAP

N

LEGEND

- ROAD
- STREAM OR DITCH
- RAILROAD TRACKS
- APPROXIMATE PROPERTY BOUNDARY
- W-19A — A ZONE GROUNDWATER MONITORING WELL
- W-26B — B ZONE GROUNDWATER MONITORING WELL
- W-32C — C ZONE GROUNDWATER MONITORING WELL
- W-33D — BEDROCK ZONE GROUNDWATER MONITORING WELL
- SAMPLED WELL LOCATION

W-05CR
W-02C
W-31C
W-12A
W-12CR
W-09C
W-29A
DESIGN MANAGEMENT ZONE
W-10AR2
W-30A
W-30C
W-08A
CLOSED RCRA SURFACE IMPOUNDMENTS
W-04AR2
W-06A
W-06C
W-21B
W-21A
W-26B
W-26A
W-32C
W-38A
W-39A
W-25A
W-37A
W-11A
W-36A
W-40A
W-28C
W-14A
W-14B
W-34D
W-20AR
W-33D
W-16AR
SHOP
FLOW
HAMMOND AVENUE
FORMER CONTAINER STORAGE FACILITY
CONCRETE BERM
W-19C
W-19A
OFFICE
GATE
W-35A
W-18D
COUNTY ROAD A
COUNTY ROAD Z

0 300 600 FEET

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 06/04/18	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106	
CHKD: AMG	DATE: 06/04/18		
APPD: JSZ	DATE: 06/11/18		
SCALE: AS SHOWN			
ISSUE DATE:			

FORMER KOPPERS INC. FACILITY
SUPERIOR, WISCONSIN

WELL LOCATIONS

PROJECT NO: 0M055618
DRAWING NUMBER
FIGURE B-1

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: WISCONSIN STATE PLANNER COORDINATE SYSTEM.
NOTE: MONITORING WELL W-04AR WAS NOT SAMPLED DURING THIS EVENT DUE TO INNER CASING DAMAGE.

G:\projects\beazer projects\superior\cadd\1st semi-annual 2018\figure b-1.dwg Last Saved By: Kchintella 6/4/2018 9:25 AM Plotted By: Kendra L. Chintella 6/4/2018 9:25 AM Scale: 1:1

APPENDIX C

TABLES

Table 1
Summary of Detected Constituents
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

Location	Parameter	Results ug/L	PAL ug/L	ES ug/L	MCL ug/L
8270D LL					
W-10AR2	Acenaphthene	16	NA	NA	NA
W-30A	Acenaphthene	15	NA	NA	NA
W-10AR2	Acenaphthylene	0.68 J	NA	NA	NA
W-30A	Acenaphthylene	0.49 J	NA	NA	NA
W-04AR2	Anthracene	0.92 J	600	3000	NA
W-30A	Anthracene	0.47 J	600	3000	NA
W-30A	Benzo(a)anthracene	0.16 J	NA	NA	NA
W-10AR2	Dibenzofuran	1.5 J	NA	NA	NA
W-30A	Dibenzofuran	2.1	NA	NA	NA
W-18D	Di-n-butyl phthalate	1.6 J	20	100	NA
W-10AR2	Fluoranthene	0.62 J	80	400	NA
W-30A	Fluoranthene	0.58 J	80	400	NA
W-10AR2	Fluorene	2	80	400	NA
W-30A	Fluorene	1.2	80	400	NA
W-10AR2	Pyrene	0.59 J	50	250	NA
W-30A	Pyrene	0.57 J	50	250	NA
8260C					
W-10AR2	1,2,4-Trimethylbenzene	5.2	96*	480*	NA
W-30A	1,2,4-Trimethylbenzene	4.5	96*	480*	NA
W-10AR2	Benzene	13	0.5	5	5
W-30A	Benzene	8.9	0.5	5	5
W-10AR2	Ethylbenzene	21	140	700	700
W-30A	Ethylbenzene	22	140	700	700
W-10AR2	Naphthalene	1.5	10	100	NA
W-30A	Naphthalene	29	10	100	NA
W-10AR2	Toluene	1.3	160	800	1000
W-30A	Toluene	0.75 J	160	800	1000
W-10AR2	Xylene, Meta & Para	2.5	400**	2000**	10000**
W-30A	Xylene, Meta & Para	2.8	400**	2000**	10000**
W-10AR2	Xylene, Ortho	13	400**	2000**	10000**
W-30A	Xylene, Ortho	3.9	400**	2000**	10000**

Table 1
Summary of Detected Constituents
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

Location	Parameter	Results ug/L	PAL ug/L	ES ug/L	MCL ug/L
8290A					
W-04AR2	1,2,3,4,6,7,8-HPCDD	0.00016	NA	NA	NA
W-06A	1,2,3,4,6,7,8-HPCDD	0.0000066 J	NA	NA	NA
W-10AR2	1,2,3,4,6,7,8-HPCDD	0.000011 J	NA	NA	NA
W-12A	1,2,3,4,6,7,8-HPCDD	0.00003 J	NA	NA	NA
W-28C	1,2,3,4,6,7,8-HPCDD	0.0000079 J	NA	NA	NA
W-28C DUP	1,2,3,4,6,7,8-HPCDD	0.0000027 J	NA	NA	NA
W-30A	1,2,3,4,6,7,8-HPCDD	0.00022	NA	NA	NA
W-30C	1,2,3,4,6,7,8-HPCDD	0.0000092 J	NA	NA	NA
W-04AR2	1,2,3,4,6,7,8-HPCDF	0.000037 J	NA	NA	NA
W-12A	1,2,3,4,6,7,8-HPCDF	0.0000082 J	NA	NA	NA
W-28C	1,2,3,4,6,7,8-HPCDF	0.0000058 J	NA	NA	NA
W-30A	1,2,3,4,6,7,8-HPCDF	0.000082	NA	NA	NA
W-04AR2	1,2,3,4,7,8,9-HPCDF	0.0000023 J	NA	NA	NA
W-30A	1,2,3,4,7,8,9-HPCDF	0.0000095 J	NA	NA	NA
W-04AR2	1,2,3,4,7,8-HXCDD	0.000002 J	NA	NA	NA
W-04AR2	1,2,3,4,7,8-HXCDF	0.0000032 J	NA	NA	NA
W-30A	1,2,3,4,7,8-HXCDF	0.00001 J	NA	NA	NA
W-04AR2	1,2,3,6,7,8-HXCDD	0.0000049 J	NA	NA	NA
W-30A	1,2,3,6,7,8-HXCDD	0.000011 J	NA	NA	NA
W-04AR2	1,2,3,6,7,8-HXCDF	0.0000027 J	NA	NA	NA
W-12A	1,2,3,6,7,8-HXCDF	0.0000026 J	NA	NA	NA
W-30A	1,2,3,6,7,8-HXCDF	0.000011 J	NA	NA	NA
W-04AR2	1,2,3,7,8,9-HXCDD	0.0000032 J	NA	NA	NA
W-04AR2	1,2,3,7,8-PECDD	0.00000063 J	NA	NA	NA
W-04AR2	2,3,4,6,7,8-HXCDF	0.000001 J	NA	NA	NA
W-04AR2	OCDD	0.0013	NA	NA	NA
W-06A	OCDD	0.000055 J	NA	NA	NA
W-06C	OCDD	0.0000085 J	NA	NA	NA
W-10AR2	OCDD	0.00011	NA	NA	NA
W-12A	OCDD	0.00027	NA	NA	NA
W-12CR	OCDD	0.000031 J	NA	NA	NA
W-28C	OCDD	0.00008 J	NA	NA	NA
W-28C DUP	OCDD	0.000041 J	NA	NA	NA
W-30A	OCDD	0.0028	NA	NA	NA
W-30C	OCDD	0.00019	NA	NA	NA
W-04AR2	OCDF	0.0001	NA	NA	NA
W-10AR2	OCDF	0.0000089 J	NA	NA	NA
W-12A	OCDF	0.000026 J	NA	NA	NA
W-28C	OCDF	0.000013 J	NA	NA	NA
W-30A	OCDF	0.00024	NA	NA	NA
W-30C	OCDF	0.000018 J	NA	NA	NA
W-04AR2	Total HPCDD	0.00039	NA	NA	NA
W-06A	Total HPCDD	0.000029 J	NA	NA	NA
W-10AR2	Total HPCDD	0.000044 J	NA	NA	NA
W-12A	Total HPCDD	0.00006	NA	NA	NA
W-28C	Total HPCDD	0.000028 J	NA	NA	NA
W-28C DUP	Total HPCDD	0.000011 J	NA	NA	NA

Table 1
Summary of Detected Constituents
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

Location	Parameter	Results ug/L	PAL ug/L	ES ug/L	MCL ug/L
W-30A	Total HPCDD	0.00052	NA	NA	NA
W-30C	Total HPCDD	0.000025 J	NA	NA	NA
W-04AR2	Total HPCDF	0.00014	NA	NA	NA
W-10AR2	Total HPCDF	0.0000073 J	NA	NA	NA
W-12A	Total HPCDF	0.000028 J	NA	NA	NA
W-28C	Total HPCDF	0.000011 J	NA	NA	NA
W-30A	Total HPCDF	0.00031	NA	NA	NA
W-30C	Total HPCDF	0.0000055 J	NA	NA	NA
W-04AR2	Total HXCDD	0.000034 J	NA	NA	NA
W-28C	Total HXCDD	0.0000019 J	NA	NA	NA
W-30A	Total HXCDD	0.000038 J	NA	NA	NA
W-04AR2	Total HXCDF	0.000061	NA	NA	NA
W-10AR2	Total HXCDF	0.0000017 J	NA	NA	NA
W-12A	Total HXCDF	0.000022 J	NA	NA	NA
W-28C	Total HXCDF	0.00000091 J	NA	NA	NA
W-30A	Total HXCDF	0.0002	NA	NA	NA
W-04AR2	Total PECDD	0.00000063 J	NA	NA	NA
W-06C	Total PECDD	0.0000019 J	NA	NA	NA
W-04AR2	Total PECDF	0.0000069 J	NA	NA	NA
W-12A	Total PECDF	0.0000092 J	NA	NA	NA
W-30A	Total PECDF	0.000047 J	NA	NA	NA
W-04AR2	Total TCDF	0.0000019 J	NA	NA	NA
W-30A	Total TCDF	0.000011	NA	NA	NA
W-04AR2	2,3,7,8-TCDD TEQ	4.74E-06	3E-06	0.00003	0.00003
W-06A	2,3,7,8-TCDD TEQ	8.25E-08	3E-06	0.00003	0.00003
W-06C	2,3,7,8-TCDD TEQ	2.55E-09	3E-06	0.00003	0.00003
W-10AR2	2,3,7,8-TCDD TEQ	1.46E-07	3E-06	0.00003	0.00003
W-12A	2,3,7,8-TCDD TEQ	7.31E-07	3E-06	0.00003	0.00003
W-12CR	2,3,7,8-TCDD TEQ	9.30E-09	3E-06	0.00003	0.00003
W-28C	2,3,7,8-TCDD TEQ	1.65E-07	3E-06	0.00003	0.00003
W-28C DUP	2,3,7,8-TCDD TEQ	3.93E-08	3E-06	0.00003	0.00003
W-30A	2,3,7,8-TCDD TEQ	7.23E-06	3E-06	0.00003	0.00003
W-30C	2,3,7,8-TCDD TEQ	1.54E-07	3E-06	0.00003	0.00003

Notes:

- Indicates the detected value exceeds one or more specified standards.

PAL - Preventative Action Limit

MCL - Maximum Contaminant Levels for drinking water

ES - Enforcement Standard

NA - Not available

J - Estimated

* - Total trimethylbenzene standard

** - Total xylene standard

At the request of WDNR, 2,3,7,8-TCDD TEQ values are compared to the congener-specific PAL and ES for 2,3,7,8-TCDD.

Table 2
Analytical Summary - First Semi-Annual 2018 Groundwater Data
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-04AR2 5/3/2018	W-06A 5/2/2018	W-06C 5/3/2018	W-10AR2 5/3/2018	W-12A 5/3/2018	W-12CR 5/3/2018	W-18D 5/3/2018	W-28C 5/3/2018	W-28C-DUP 5/3/2018	W-30A 5/3/2018	W-30C 5/2/2018	Equipment Blank 5/2/2018	Equipment Blank 5/3/2018	Trip Blank 5/2/2018	Trip Blank 5/3/2018
8260C																
1,1,1-TRICHLOROETHANE	UG/L	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	NA	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2,4-TRIMETHYLBENZENE	UG/L	0.75 U	0.75 U	0.75 U	**5.2**	0.75 U	0.75 U	NA	0.75 U	0.75 U	**4.5**	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
1,3,5-TRIMETHYLBENZENE	UG/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	NA	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
BENZENE	UG/L	0.41 U	0.41 U	0.41 U	**13**	0.41 U	0.41 U	NA	0.41 U	0.41 U	**8.9**	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CHLOROMETHANE	UG/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ETHYLBENZENE	UG/L	0.74 U	0.74 U	0.74 U	**21**	0.74 U	0.74 U	NA	0.74 U	0.74 U	**22**	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U
METHYL(TERT)BUTYL ETHER	UG/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	NA	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
NAPHTHALENE	UG/L	0.43 U	0.43 U	0.43 U	**1.5**	0.43 U	0.43 U	NA	0.43 U	0.43 U	**29**	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-BUTYLBENZENE	UG/L	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	NA	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
N-PROPYLBENZENE	UG/L	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	NA	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
STYRENE	UG/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	NA	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
TOLUENE	UG/L	0.51 U	0.51 U	0.51 U	**1.3**	0.51 U	0.51 U	NA	0.51 U	0.51 U	**0.75 J**	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
XYLENE, META & PARA	UG/L	0.66 U	0.66 U	0.66 U	**2.5**	0.66 U	0.66 U	NA	0.66 U	0.66 U	**2.8**	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
O-XYLENE	UG/L	0.76 U	0.76 U	0.76 U	**13**	0.76 U	0.76 U	NA	0.76 U	0.76 U	**3.9**	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
8270D LL																
1,2,4-TRICHLOROBENZENE	UG/L	0.3 U	0.29 U	0.3 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.31 U	0.29 U	0.31 U	0.32 U	NA	NA
1,2-DICHLOROBENZENE	UG/L	0.29 U	0.28 U	0.29 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.3 U	0.28 U	0.3 U	0.31 U	NA	NA
1,3-DICHLOROBENZENE	UG/L	0.25 U	0.24 U	0.25 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.26 U	0.24 U	0.26 U	0.26 U	NA	NA
1,4-DICHLOROBENZENE	UG/L	0.27 U	0.26 U	0.27 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.28 U	0.26 U	0.28 U	0.28 U	NA	NA
1-METHYLNAPHTHALENE	UG/L	0.5 U	0.48 U	0.5 U	0.5 U	0.48 U	0.48 U	0.48 U	0.48 U	0.5 U	0.52 U	0.49 U	0.51 U	0.53 U	NA	NA
2,3,4,6-TETRACHLOROPHENOL	UG/L	1.5 U	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	NA	NA
2,3,5,6-TETRACHLOROPHENOL	UG/L	2.5 U	2.4 U	2.5 U	2.5 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.6 U	2.4 U	2.6 U	2.6 U	NA	NA
2,4,5-TRICHLOROPHENOL	UG/L	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.4 U	2.2 U	2.4 U	2.4 U	NA	NA
2,4,6-TRICHLOROPHENOL	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	NA	NA
2,4-DICHLOROPHENOL	UG/L	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.4 U	2.2 U	2.3 U	2.4 U	NA	NA
2,4-DIMETHYLPHENOL	UG/L	3.3 U	3.2 U	3.4 U	3.3 U	3.2 U	3.2 U	3.2 U	3.2 U	3.3 U	3.5 U	3.3 U	3.4 U	3.5 U	NA	NA
2,4-DINITROPHENOL	UG/L	7.4 U	7.1 U	7.5 U	7.4 U	7.1 U	7.1 U	7.1 U	7.1 U	7.4 U	7.8 U	7.3 U	7.6 U	7.8 U	NA	NA
2,4-DINITROTOLUENE	UG/L	0.3 U	0.29 U	0.3 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.31 U	0.29 U	0.31 U	0.32 U	NA	NA
2,6-DINITROTOLUENE	UG/L	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.13 U	NA	NA
2-CHLORONAPHTHALENE	UG/L	0.34 U	0.33 U	0.34 U	0.34 U	0.33 U	0.32 U	0.33 U	0.33 U	0.34 U	0.36 U	0.33 U	0.35 U	0.36 U	NA	NA
2-CHLOROPHENOL	UG/L	0.8 U	0.77 U	0.8 U	0.79 U	0.76 U	0.76 U	0.77 U	0.77 U	0.8 U	0.84 U	0.78 U	0.82 U	0.84 U	NA	NA
2-METHYLNAPHTHALENE	UG/L	0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.12 U	0.12 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.14 U	NA	NA
2-METHYLPHENOL	UG/L	0.31 U	0.3 U	0.31 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.33 U	0.3 U	0.32 U	0.33 U	NA	NA
2-NITROANILINE	UG/L	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	NA	NA
2-NITROPHENOL	UG/L	2.1 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.3 U	NA	NA
3,3'-DICHLOROBENZIDINE	UG/L	0.94 U	0.9 U	0.95 U	0.93 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 U	0.99 U	0.92 U	0.97 U	0.99 U	NA	NA
3-NITROANILINE	UG/L	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.4 U	2.2 U	2.4 U	2.4 U	NA	NA
4,6-DINITRO-2-METHYLPHENOL	UG/L	4.9 U	4.7 U	4.9 U	4.9 U	4.7 U	4.7 U	4.7 U	4.7 U	4.9 U	5.2 U	4.8 U	5.1 U	5.2 U	NA	NA
4-BROMOPHENYL PHENYLETHER	UG/L	0.91 U	0.87 U	0.92 U	0.9 U	0.87 U	0.87 U	0.87 U	0.88 U	0.91 U	0.96 U	0.89 U	0.94 U	0.96 U	NA	NA

Table 2
Analytical Summary - First Semi-Annual 2018 Groundwater Data
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-04AR2 5/3/2018	W-06A 5/2/2018	W-06C 5/3/2018	W-10AR2 5/3/2018	W-12A 5/3/2018	W-12CR 5/3/2018	W-18D 5/3/2018	W-28C 5/3/2018	W-28C-DUP 5/3/2018	W-30A 5/3/2018	W-30C 5/2/2018	Equipment Blank 5/2/2018	Equipment Blank 5/3/2018	Trip Blank 5/2/2018	Trip Blank 5/3/2018
4-CHLORO-3-METHYLPHENOL	UG/L	2.2 U	2.1 U	2.2 U	2.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.2 U	2.3 U	2.1 U	2.3 U	2.3 U	NA	NA
4-CHLOROANILINE	UG/L	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.2 U	NA	NA
4-CHLOROPHENYLPHENYL-ETHER	UG/L	0.81 U	0.78 U	0.81 U	0.8 U	0.77 U	0.77 U	0.78 U	0.78 U	0.81 U	0.85 U	0.79 U	0.83 U	0.85 U	NA	NA
4-METHYLPHENOL	UG/L	0.44 U	0.42 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.44 U	0.46 U	0.43 U	0.45 U	0.46 U	NA	NA
4-NITROANILINE	UG/L	3.9 U	3.8 U	4 U	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.9 U	4.1 U	3.8 U	4 U	4.1 U	NA	NA
4-NITROPHENOL	UG/L	2.3 U	2.2 U	2.4 U	2.3 U	2.2 U	2.2 U	2.2 U	2.3 U	2.3 U	2.5 U	2.3 U	2.4 U	2.5 U	NA	NA
ACENAPHTHENE	UG/L	0.36 U	0.34 U	0.36 U	**16**	0.34 U	0.34 U	0.35 U	0.35 U	0.36 U	**15**	0.35 U	0.37 U	0.38 U	NA	NA
ACENAPHTHYLENE	UG/L	0.32 U	0.31 U	0.32 U	**0.68 J**	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	**0.49 J**	0.31 U	0.33 U	0.34 U	NA	NA
ANTHRACENE	UG/L	**0.92 J**	0.31 U	0.32 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	**0.47 J**	0.31 U	0.33 U	0.34 U	NA	NA
BENZO (A) ANTHRACENE	UG/L	0.044 U	0.042 U	0.044 U	0.044 U	0.042 U	0.042 U	0.042 U	0.042 U	0.044 U	**0.16 J**	0.043 U	0.045 U	0.046 U	NA	NA
BENZO (A) PYRENE	UG/L	0.056 U	0.054 U	0.056 U	0.056 U	0.054 U	0.053 U	0.054 U	0.054 U	0.056 U	0.059 U	0.055 U	0.058 U	0.059 U	NA	NA
BENZO (B) FLUORANTHENE	UG/L	0.058 U	0.056 U	0.058 U	0.058 U	0.055 U	0.055 U	0.056 U	0.056 U	0.058 U	0.061 U	0.057 U	0.06 U	0.061 U	NA	NA
BENZO (G,H,I) PERYLENE	UG/L	0.42 U	0.4 U	0.42 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.44 U	0.41 U	0.43 U	0.44 U	NA	NA
BENZO (K) FLUORANTHENE	UG/L	0.074 U	0.071 U	0.074 U	0.073 U	0.071 U	0.071 U	0.071 U	0.071 U	0.074 U	0.078 U	0.072 U	0.076 U	0.078 U	NA	NA
BENZOIC ACID	UG/L	4.6 U	4.4 U	4.6 U	4.5 U	4.4 U	4.4 U	4.4 U	4.4 U	4.6 U	4.8 U	4.5 U	4.7 U	4.8 U	NA	NA
BENZYL ALCOHOL	UG/L	3.1 U	2.9 U	3.1 U	3 U	2.9 U	2.9 U	2.9 U	2.9 U	3.1 U	3.2 U	3 U	3.1 U	3.2 U	NA	NA
BIS (2-CHLOROETHOXY)- METHANE	UG/L	0.3 U	0.29 U	0.3 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.31 U	0.29 U	0.31 U	0.32 U	NA	NA
BIS (2-CHLOROETHYL) ETHER	UG/L	0.35 U	0.34 U	0.35 U	0.35 U	0.33 U	0.33 U	0.34 U	0.34 U	0.35 U	0.37 U	0.34 U	0.36 U	0.37 U	NA	NA
BIS (2-CHLOROISOPROPYL)-ETHER	UG/L	0.3 U	0.29 U	0.3 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.31 U	0.29 U	0.31 U	0.32 U	NA	NA
BIS (2-ETHYLHEXYL)- PHTHALATE	UG/L	2.4 U	2.3 U	2.4 U	2.4 U	2.3 U	2.3 U	2.3 U	2.3 U	2.4 U	2.6 U	2.4 U	2.5 U	2.6 U	NA	NA
BUTYL BENZYL PHTHALATE	UG/L	0.27 U	0.26 U	0.27 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.28 U	0.26 U	0.28 U	0.28 U	NA	NA
CHRYSENE	UG/L	0.14 U	0.13 U	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.15 U	0.14 U	0.14 U	0.15 U	NA	NA
DIBENZO (A,H) ANTHRACENE	UG/L	0.064 U	0.061 U	0.064 U	0.063 U	0.061 U	0.061 U	0.061 U	0.062 U	0.064 U	0.067 U	0.062 U	0.066 U	0.067 U	NA	NA
DIBENZOFURAN	UG/L	0.35 U	0.34 U	0.35 U	**1.5 J**	0.33 U	0.33 U	0.34 U	0.34 U	0.35 U	**2.1**	0.34 U	0.36 U	0.37 U	NA	NA
DIETHYLPHTHALATE	UG/L	0.44 U	0.42 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.44 U	0.46 U	0.43 U	0.45 U	0.46 U	NA	NA
DIMETHYLPHTHALATE	UG/L	0.38 U	0.36 U	0.38 U	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.38 U	0.4 U	0.37 U	0.39 U	0.4 U	NA	NA
DI-N-BUTYLPHTHALATE	UG/L	0.8 U	0.77 U	0.8 U	0.79 U	0.76 U	0.76 U	**1.6 J**	0.77 U	0.8 U	0.84 U	0.78 U	0.82 U	0.84 U	NA	NA
DI-N-OCTYLPHTHALATE	UG/L	2.5 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.6 U	2.4 U	2.5 U	2.6 U	NA	NA
FLUORANTHENE	UG/L	0.32 U	0.31 U	0.32 U	**0.62 J**	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	**0.58 J**	0.31 U	0.33 U	0.34 U	NA	NA
FLUORENE	UG/L	0.38 U	0.36 U	0.38 U	**2**	0.36 U	0.36 U	0.36 U	0.37 U	0.38 U	**1.2**	0.37 U	0.39 U	0.4 U	NA	NA
HEXACHLOROBENZENE	UG/L	0.14 U	0.13 U	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.15 U	0.14 U	0.14 U	0.15 U	NA	NA
HEXACHLOROBUTADIENE	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	NA	NA
HEXACHLOROCYCLOPENTADIENE	UG/L	3.4 U	3.3 U	3.5 U	3.4 U	3.3 U	3.3 U	3.3 U	3.3 U	3.4 U	3.6 U	3.4 U	3.5 U	3.6 U	NA	NA
HEXACHLOROETHANE	UG/L	0.97 U	0.93 U	0.98 U	0.96 U	0.93 U	0.93 U	0.93 U	0.93 U	0.97 U	1 U	0.95 U	1 U	1 U	NA	NA
INDENO (1,2,3-CD) PYRENE	UG/L	0.084 U	0.08 U	0.084 U	0.083 U	0.08 U	0.08 U	0.081 U	0.081 U	0.084 U	0.088 U	0.082 U	0.086 U	0.088 U	NA	NA
ISOPHORONE	UG/L	0.29 U	0.28 U	0.29 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.3 U	0.28 U	0.3 U	0.31 U	NA	NA
NAPHTHALENE	UG/L	NA	NA	NA	NA	NA	NA	0.29 U	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE	UG/L	0.45 U	0.43 U	0.45 U	0.45 U	0.43 U	0.43 U	0.43 U	0.43 U	0.45 U	0.47 U	0.44 U	0.46 U	0.47 U	NA	NA
N-NITROSODI-N-PROPYLAMINE	UG/L	0.14 U	0.13 U	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.15 U	0.14 U	0.14 U	0.15 U	NA	NA
N-NITROSO-DI-PHENYLAMINE	UG/L	0.34 U	0.33 U	0.34 U	0.34 U	0.33 U	0.32 U	0.33 U	0.33 U	0.34 U	0.36 U	0.33 U	0.35 U	0.36 U	NA	NA
PENTACHLOROPHENOL	UG/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	NA	NA
PHENANTHRENE	UG/L	0.35 U	0.34 U	0.35 U	0.35 U	0.33 U	0.33 U	0.34 U	0.34 U	0.35 U	0.37 U	0.34 U	0.36 U	0.37 U	NA	NA
PHENOL	UG/L	0.36 U	0.34 U	0.36 U	0.36 U	0.34 U	0.34 U	0.35 U	0.35 U	0.36 U	0.38 U	0.35 U	0.37 U	0.38 U	NA	NA
PYRENE	UG/L	0.48 U	0.46 U	0.48 U	**0.59 J**	0.46 U	0.46 U	0.46 U	0.46 U	0.48 U	**0.57 J**	0.47 U	0.49 U	0.5 U	NA	NA

Table 2
Analytical Summary - First Semi-Annual 2018 Groundwater Data
First Semi-Annual 2018 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-04AR2 5/3/2018	W-06A 5/2/2018	W-06C 5/3/2018	W-10AR2 5/3/2018	W-12A 5/3/2018	W-12CR 5/3/2018	W-18D 5/3/2018	W-28C 5/3/2018	W-28C-DUP 5/3/2018	W-30A 5/3/2018	W-30C 5/2/2018	Equipment Blank 5/2/2018	Equipment Blank 5/3/2018	Trip Blank 5/2/2018	Trip Blank 5/3/2018
8290A																
1,2,3,4,6,7,8-HPCDD (TEF = 0.01)	UG/L	**0.00016**	**0.0000066 J**	0.00000046 U	**0.000011 J**	**0.00003 J**	0.00000069 U	NA	**0.0000079 J**	**0.0000027 J**	**0.00022**	**0.0000092 J**	0.00000036 U	0.00000027 U	NA	NA
1,2,3,4,6,7,8-HPCDF (TEF = 0.01)	UG/L	**0.000037 J**	0.0000003 U	0.000000041 U	0.000000033 U	**0.0000082 J**	0.000000019 U	NA	**0.0000058 J**	0.000000068 U	**0.000082**	0.00000012 U	0.00000012 U	0.000000024 U	NA	NA
1,2,3,4,7,8,9-HPCDF (TEF = 0.01)	UG/L	**0.0000023 J**	0.0000004 U	0.000000051 U	0.000000045 U	0.0000003 U	0.000000026 U	NA	0.00000031 U	0.000000078 U	**0.0000095 J**	0.00000015 U	0.00000015 U	0.000000028 U	NA	NA
1,2,3,4,7,8-HXCDD (TEF = 0.1)	UG/L	**0.000002 J**	0.00000027 U	0.00000012 U	0.00000021 U	0.00000055 U	0.000000064 U	NA	0.00000018 U	0.00000023 U	0.00000025 U	0.00000012 U	0.000000095 U	0.00000061 U	NA	NA
1,2,3,4,7,8-HXCDF (TEF = 0.1)	UG/L	**0.0000032 J**	0.000000074 U	0.00000023 U	0.000000077 U	0.00000061 U	0.00000022 U	NA	0.00000013 U	0.00000002 U	**0.00001 J**	0.0000002 U	0.00000015 U	0.00000011 U	NA	NA
1,2,3,6,7,8-HXCDD (TEF = 0.1)	UG/L	**0.0000049 J**	0.00000031 U	0.00000014 U	0.00000025 U	0.00000054 U	0.000000071 U	NA	0.00000019 U	0.00000025 U	**0.000011 J**	0.00000014 U	0.000000096 U	0.0000007 U	NA	NA
1,2,3,6,7,8-HXCDF (TEF = 0.1)	UG/L	**0.0000027 J**	0.000000074 U	0.00000024 U	0.000000075 U	**0.0000026 J**	0.00000022 U	NA	0.00000014 U	0.000000022 U	**0.000011 J**	0.0000002 U	0.00000015 U	0.00000011 U	NA	NA
1,2,3,7,8,9-HXCDD (TEF = 0.1)	UG/L	**0.0000032 J**	0.00000027 U	0.00000012 U	0.00000021 U	0.00000051 U	0.000000063 U	NA	0.00000017 U	0.00000022 U	0.00000024 U	0.00000012 U	0.000000089 U	0.00000061 U	NA	NA
1,2,3,7,8,9-HXCDF (TEF = 0.1)	UG/L	0.00000036 U	0.000000085 U	0.00000026 U	0.000000084 U	0.00000075 U	0.0000003 U	NA	0.00000015 U	0.000000025 U	0.0000017 U	0.00000025 U	0.00000018 U	0.00000013 U	NA	NA
1,2,3,7,8-PECDD (TEF = 1)	UG/L	**0.00000063 J**	0.00000072 U	0.00000063 U	0.00000055 U	0.0000011 U	0.00000048 U	NA	0.00000087 U	0.00000089 U	0.00000061 U	0.0000013 U	0.00000063 U	0.0000011 U	NA	NA
1,2,3,7,8-PECDF (TEF = 0.03)	UG/L	0.00000017 U	0.00000023 U	0.000000045 U	0.0000002 U	0.00000059 U	0.00000061 U	NA	0.00000039 U	0.00000043 U	0.00000078 U	0.00000053 U	0.00000036 U	0.0000009 U	NA	NA
2,3,4,6,7,8-HXCDF (TEF = 0.1)	UG/L	**0.000001 J**	0.000000077 U	0.00000022 U	0.000000068 U	0.00000058 U	0.00000021 U	NA	0.00000013 U	0.000000021 U	0.0000014 U	0.0000002 U	0.00000014 U	0.0000001 U	NA	NA
2,3,4,7,8-PECDF (TEF = 0.3)	UG/L	0.00000017 U	0.0000002 U	0.000000039 U	0.00000021 U	0.00000056 U	0.00000053 U	NA	0.00000041 U	0.00000038 U	0.00000088 U	0.00000048 U	0.00000033 U	0.00000082 U	NA	NA
2,3,7,8-TCDD (TEF = 1)	UG/L	0.00000051 U	0.0000031 U	0.0000032 U	0.0000021 U	0.0000029 U	0.0000031 U	NA	0.0000025 U	0.000003 U	0.0000023 U	0.0000035 U	0.0000034 U	0.0000041 U	NA	NA
2,3,7,8-TCDF (TEF = 0.1)	UG/L	0.00000014 U	0.0000013 U	0.00000082 U	0.00000079 U	0.0000011 U	0.0000014 U	NA	0.00000093 U	0.00000076 U	0.000001 U	0.0000011 U	0.0000013 U	0.0000014 U	NA	NA
OCDD (TEF = 0.0003)	UG/L	**0.0013**	**0.000055 J**	**0.0000085 J**	**0.00011**	**0.00027**	**0.000031 J**	NA	**0.00008 J**	**0.000041 J**	**0.0028**	**0.00019**	**0.0000038 J**	0.000000032 U	NA	NA
OCDF (TEF = 0.0003)	UG/L	**0.0001**	0.000001 U	0.0000017 U	**0.0000089 J**	**0.000026 J**	0.000002 U	NA	**0.000013 J**	0.0000022 U	**0.00024**	**0.000018 J**	0.0000016 U	0.0000014 U	NA	NA
TOTAL HPCDD	UG/L	**0.00039**	**0.000029 J**	0.00000046 U	**0.000044 J**	**0.00006**	0.00000069 U	NA	**0.000028 J**	**0.000011 J**	**0.00052**	**0.000025 J**	0.00000036 U	0.00000027 U	NA	NA
TOTAL HPCDF	UG/L	**0.00014**	0.0000004 U	0.000000051 U	**0.0000073 J**	**0.000028 J**	0.000000026 U	NA	**0.000011 J**	0.000000078 U	**0.00031**	**0.0000055 J**	0.00000015 U	0.000000028 U	NA	NA
TOTAL HXCDD	UG/L	**0.000034 J**	0.000000031 U	0.00000014 U	0.00000025 U	0.00000055 U	0.000000071 U	NA	**0.0000019 J**	0.00000025 U	**0.000038 J**	0.00000014 U	0.000000096 U	0.0000007 U	NA	NA
TOTAL HXCDF	UG/L	**0.000061**	0.000000085 U	0.00000026 U	**0.0000017 J**	**0.000022 J**	0.0000003 U	NA	**0.00000091 J**	0.000000025 U	**0.0002**	0.00000025 U	0.00000018 U	0.00000013 U	NA	NA
TOTAL PECDD	UG/L	**0.00000063 J**	0.00000072 U	**0.0000019 J**	0.00000055 U	0.0000011 U	0.00000048 U	NA	0.00000087 U	0.00000089 U	0.00000061 U	0.0000013 U	0.00000063 U	0.0000011 U	NA	NA
TOTAL PECDF	UG/L	**0.0000069 J**	0.00000023 U	0.000000045 U	0.00000021 U	**0.0000092 J**	0.00000061 U	NA	0.00000041 U	0.00000043 U	**0.000047 J**	0.00000053 U	0.00000036 U	0.0000009 U	NA	NA
TOTAL TCDD	UG/L	0.00000051 U	0.0000031 U	0.0000032 U	0.0000021 U	0.0000029 U	0.0000031 U	NA	0.0000025 U	0.000003 U	0.0000023 U	0.0000035 U	0.0000034 U	0.0000041 U	NA	NA
TOTAL TCDF	UG/L	**0.0000019 J**	0.0000013 U	0.00000082 U	0.00000079 U	0.0000011 U	0.0000014 U	NA	0.00000093 U	0.00000076 U	**0.000011**	0.0000011 U	0.0000013 U	0.0000014 U	NA	NA
2,3,7,8-TCDD TEQ - ND = 0	UG/L	**4.74E-06**	**8.25E-08**	**2.55E-09**	**1.46E-07**	**7.31E-07**	**9.30E-09**	NA	**1.65E-07**	**3.93E-08**	**7.23E-06**	**1.54E-07**	**1.14E-09**	0.00E+00	NA	NA

Notes:
TEF = Toxicity Equivalent Factor (World Health Organization, 2005)
TEQ = Toxicity Equivalent Quotient
Bold values represent detections.
DUP indicates duplicate sample.
U indicates compound was not detected.
J indicates an estimated value.
NA indicates not analyzed.
Laboratory results that were U-qualified were assigned a value of 0 for 2,3,7,8-TCDD TEQ calculation.

APPENDIX D

DATA EVALUATION SUMMARY

FTS, LLC

DATE: June 4, 2018

FROM: Kendra Chintella

SUBJECT: Superior GW

SAMPLE DELIVERY GROUP (SDG): 480-135500-1

SAMPLES: SUPE-W-06A-050218, SUPE-EB-01-050218, SUPE-W-06C-050318, SUPE-W-12A-050318, SUPE-W-12CR-050318, SUPE-EB-02-050318, SUPE-W-30A-050318, SUPE-W-30C-050318, SUPE-W-99-050318(W-28C), SUPE-W-28C-050318, SUPE-W-10AR2-050318, SUPE-W-04AR2-050318, SUPE-TB-02-050318, SUPE-W-18D-050318, SUPE-W-TB-01-050218

ANALYSES: Method 8260C (VOCs), 8270D8270D LL (SVOCs)

LABORATORY: TestAmerica Laboratories, Inc., Buffalo, Chicago

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliance: None

□ Holding Times
Noncompliance: SVOCs for sample W-18D were extracted one day outside of the holding time when analyzed by the Chicago laboratory. SVOCs were analyzed inside of the holding time by the Buffalo laboratory. SVOC results analyzed by the Chicago laboratory are presented due to laboratory certification and no action is taken as the results are consistent to results analyzed inside of the holding time.

□ Laboratory Blank Contamination
Noncompliance: None

□ Field Blank Contamination
Noncompliance: None

□ Field Duplicate Precision
Noncompliance: None

□ Surrogate Recoveries
Noncompliance: The surrogate recoveries of 2-fluorobiphenyl and nitrobenzene-d5 were above the recovery limits in samples W-99 and W-04AR2. No action was taken on this basis.

□ Matrix Spike/Matrix Spike Duplicate
Noncompliance: The RPDs of chloromethane, 2,4-dinitrophenol, and benzoic acid were above the recovery limits. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliance: The LCS recoveries of chrysene and isophorone were above the recovery limits. The LCS recovery of benzoic acid fell below the recovery limits. No action was taken on this basis.

FTS, LLC

DATE: June 11, 2018

FROM: Kendra Chintella

SUBJECT: Superior GW

SAMPLE DELIVERY GROUP (SDG): 480-135500-2

SAMPLES: SUPE-W-06A-050218, SUPE-EB-01-050218, SUPE-W-06C-050318, SUPE-W-12A-050318, SUPE-W-12CR-050318, SUPE-EB-02-050318, SUPE-W-30A-050318, SUPE-W-30C-050318, SUPE-W-99-050318(W-28C), SUPE-W-28C-050318, SUPE-W-10AR2-050318, SUPE-W-04AR2-050318

ANALYSES: Method 8290A (Dioxins/Furans)

LABORATORY: TestAmerica Laboratories, Inc., Knoxville

The data contained in this SDG were evaluated with regard to the following parameters:

□ Data Completeness
Noncompliance: None

□ Holding Times
Noncompliance: None

□ Laboratory Blank Contamination
Noncompliance: None

□ Field Blank Contamination
Noncompliance: OCDD was detected in the equipment blank. See attached page for details.

□ Field Duplicate Precision
Noncompliance: See attached page for details.

□ Surrogate Recoveries
Noncompliance: None

□ Matrix Spike/Matrix Spike Duplicate
Noncompliance: The RPD of 2,3,7,8-TCDD was above the recovery limits. No action was taken on this basis.

□ Laboratory Control Sample
Noncompliance: None

Field Blank Contamination:

The following analyte was detected in the aqueous equipment blank, SUPE-EB-01-050218, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
OCDD	3.8 J pg/l	19 pg/l

An action level of 5X the maximum concentration was used to evaluate the sample data for field blank contamination. Associated samples with concentrations below the blank action level were qualified "U" for field blank contamination.

Field Duplicate Precision:

FIELD DUPLICATE PRECISION					
ANALYTE	W-28C	QUAL	W-99	QUAL	RPD
Total HxCDD	1.9	J	0.25	U	NC
1,2,3,4,6,7,8-HpCDD	7.9	J	2.7	J	98.11*
Total HpCDD	28	J	11	J	87.18*
OCDD	80	J	41	J	64.46*
Total HxCDF	0.91	J	0.025	U	NC
1,2,3,4,6,7,8-HpCDF	5.8	J	0.068	U	NC
Total HpCDF	11	J	0.078	U	NC
OCDF	13	J	2.2	U	NC

NC – not calculated due to nondetect result
* - RPD is greater than 30%, associated samples are qualified as estimated, "J," due to laboratory or field sampling imprecision

APPENDIX E

LABORATORY ANALYTICAL DATA

(C.D. AND PRINTOUT)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-135500-1
Client Project/Site: Superior, WI Semiannual Groundwater
Revision: 1

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
6/4/2018 5:15:00 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Reported value was between the limit of detection and the limit of quantitation.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
F2	MS/MSD RPD exceeds control limits

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)

Job ID: 480-135500-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-135500-1

Revised : to add methylphenol 3 & 4 to SVOC list

Comments
No additional comments.

Receipt
The samples were received on 5/5/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 2.7º C, 2.9º C, 3.0º C, 3.2º C, 3.3º C and 3.6º C.

Receipt Exceptions
Due to a shipping error, SVOC Sample SUPE- W-18D-050318 (480-135500-14) was extracted one day outside of holding time fby the Chicago lab.

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

GC/MS Semi VOA (Buffalo)
All SVOC samples were analyzed at the Buffalo in order to meet the Pentachlorophenol RL of 1 ppb.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 480-413347 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 480-413347 recovered outside acceptance criteria, low biased, for Benzyl alcohol and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 480-413347 recovered above the upper control limit for Carbazole, 3-Nitroaniline, 4-Nitroaniline and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SUPE-W-18D-050318.

Method(s) 8270D LL: The laboratory control sample (LCS) for preparation batch 480-413163 and analytical batch 480-413347 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D LL: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 480-413163 and analytical batch 480-413347 recovered outside control limits for the following analyte(s): Benzoic acid. Benzoic acid has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method(s) 8270D: Surrogate recovery for the following samples was outside the upper control limit: SUPE-W-99-050318 and SUPE-W-04AR2-050318. These samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Sample SUPE- W-18D-050318 (480-135500-14) was extracted within holding time and analyzed in Buffalo for Pentachlorphenol as well as all compounds in the full SVOC list with the exception of 2,3,5,6 Tetrachlorphenol which the lab does not analyzed for. Additionally, the Buffalo lab does not hold Wisconsin certification for 2-chlorophenol, 2- methyphenol and 2- nitrophenol as indicated on certification summary .

GC/MS Semi VOA (Chicago)
Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 500-431644 was outside the method criteria for the following analyte(s): bis(chloroisopropyl) ether, 2,4-Dinitrophenol and 4-Nitrophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed;

Job ID: 480-135500-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 500-431890 was outside the method criteria for the following analyte(s): bis(chloroisopropyl) ether, 2,4-Dinitrophenol, 4-Nitrophenol, Hexachlorocyclopentadiene and 2-Fluorobiphenyl. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 500-431968 was outside the method criteria for the following analyte: Benzoic acid. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 500-431968 recovered above the upper control limit for bis(chloroisopropyl) ether, 2-Nitroaniline and Phenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SUPE-EB-02-050318, SUPE-W-30A-050318, SUPE-W-30C-050318, SUPE-W-99-050318, SUPE-W-28C-050318, SUPE-W-10AR2-050318 and SUPE-W-04AR2-050318.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 500-431815 and 500-431815 and analytical batch 500-431890 recovered outside control limits for the following analytes: Chrysene and Isophorone. These analytes were biased high in the LCS and were not detected in the associated sample; therefore, the data have been reported.SUPE-W-18D-050318 and LCS 500-431815/2-A

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

Organic Prep
Method(s) 3510C: 3510C__LL

The following sample was prepared outside of preparation holding time because the sample was not shipped by the Buffalo lab with the others and it was received in the Chicago lab one day past holding time. : 480-135500-14. The holding time was up on 05/10/18 and the sample was extracted on 05/11/18,

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

Detection Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-06A-050218 — Lab Sample ID: 480-135500-1

No Detections.

Client Sample ID: SUPE-EB-01-050218 — Lab Sample ID: 480-135500-2

No Detections.

Client Sample ID: SUPE-W-06C-050318 — Lab Sample ID: 480-135500-3

No Detections.

Client Sample ID: SUPE-W-12A-050318 — Lab Sample ID: 480-135500-4

No Detections.

Client Sample ID: SUPE-W-12CR-050318 — Lab Sample ID: 480-135500-5

No Detections.

Client Sample ID: SUPE-EB-02-050318 — Lab Sample ID: 480-135500-6

No Detections.

Client Sample ID: SUPE-W-30A-050318 — Lab Sample ID: 480-135500-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	4.5		1.0	0.75	ug/L	1		8260C	Total/NA
Benzene	8.9		1.0	0.41	ug/L	1		8260C	Total/NA
Ethylbenzene	22		1.0	0.74	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.8		2.0	0.66	ug/L	1		8260C	Total/NA
Naphthalene	29		1.0	0.43	ug/L	1		8260C	Total/NA
o-Xylene	3.9		1.0	0.76	ug/L	1		8260C	Total/NA
Toluene	0.75	J	1.0	0.51	ug/L	1		8260C	Total/NA
Xylenes, Total	6.7		2.0	0.66	ug/L	1		8260C	Total/NA
Acenaphthene	15		1.0	0.38	ug/L	1		8270D	Total/NA
Acenaphthylene	0.49	J	1.0	0.34	ug/L	1		8270D	Total/NA
Anthracene	0.47	J	1.0	0.34	ug/L	1		8270D	Total/NA
Dibenzofuran	2.1		2.1	0.37	ug/L	1		8270D	Total/NA
Fluoranthene	0.58	J	1.0	0.34	ug/L	1		8270D	Total/NA
Fluorene	1.2		1.0	0.40	ug/L	1		8270D	Total/NA
Pyrene	0.57	J	1.0	0.50	ug/L	1		8270D	Total/NA
Benzo[a]anthracene	0.16	J	0.21	0.046	ug/L	1		8270D	Total/NA

Client Sample ID: SUPE-W-30C-050318 — Lab Sample ID: 480-135500-8

No Detections.

Client Sample ID: SUPE-W-99-050318 — Lab Sample ID: 480-135500-9

No Detections.

Client Sample ID: SUPE-W-28C-050318 — Lab Sample ID: 480-135500-10

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-10AR2-050318 — Lab Sample ID: 480-135500-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	5.2		1.0	0.75	ug/L	1		8260C	Total/NA
Benzene	13		1.0	0.41	ug/L	1		8260C	Total/NA
Ethylbenzene	21		1.0	0.74	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.5		2.0	0.66	ug/L	1		8260C	Total/NA
Naphthalene	1.5		1.0	0.43	ug/L	1		8260C	Total/NA
o-Xylene	13		1.0	0.76	ug/L	1		8260C	Total/NA
Toluene	1.3		1.0	0.51	ug/L	1		8260C	Total/NA
Xylenes, Total	16		2.0	0.66	ug/L	1		8260C	Total/NA
Acenaphthene	16		0.99	0.36	ug/L	1		8270D	Total/NA
Acenaphthylene	0.68	J	0.99	0.32	ug/L	1		8270D	Total/NA
Dibenzofuran	1.5	J	2.0	0.35	ug/L	1		8270D	Total/NA
Fluoranthene	0.62	J	0.99	0.32	ug/L	1		8270D	Total/NA
Fluorene	2.0		0.99	0.38	ug/L	1		8270D	Total/NA
Pyrene	0.59	J	0.99	0.48	ug/L	1		8270D	Total/NA

Client Sample ID: SUPE-W-04AR2-050318 — Lab Sample ID: 480-135500-12

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.92	J	1.0	0.32	ug/L	1		8270D	Total/NA

Client Sample ID: SUPE-TB-02-050318 — Lab Sample ID: 480-135500-13

No Detections.

Client Sample ID: SUPE-W-18D-050318 — Lab Sample ID: 480-135500-14

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
2,4-Dichlorophenol	0.17	J	0.50	0.056	ug/L	1		8270D LL	Total/NA
2,4,5-Trichlorophenol	0.17	J	5.0	0.065	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	0.67	J	5.0	0.42	ug/L	1		8270D LL	Total/NA
Di-n-butyl phthalate	1.6	J H	4.8	0.77	ug/L	1		8270D	Total/NA

Client Sample ID: SUPE-W-TB-01-050218 — Lab Sample ID: 480-135500-15

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: SUPE-W-06A-050218

Date Collected: 05/02/18 15:44
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/11/18 01:39	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/11/18 01:39	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/11/18 01:39	1
Benzene	<0.41		1.0	0.41	ug/L			05/11/18 01:39	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/11/18 01:39	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/11/18 01:39	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/11/18 01:39	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/11/18 01:39	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/11/18 01:39	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/11/18 01:39	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/11/18 01:39	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/11/18 01:39	1
Styrene	<0.73		1.0	0.73	ug/L			05/11/18 01:39	1
Toluene	<0.51		1.0	0.51	ug/L			05/11/18 01:39	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/11/18 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*		*05/11/18 01:39*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*05/11/18 01:39*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*05/11/18 01:39*	*1*
Toluene-d8 (Surr)	*83*		*80 - 120*		*05/11/18 01:39*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*24 - 146*	*05/08/18 14:14*	*05/09/18 14:25*	*1*
2-Fluorobiphenyl	*87*		*37 - 120*	*05/08/18 14:14*	*05/09/18 14:25*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*05/08/18 14:14*	*05/09/18 14:25*	*1*
Nitrobenzene-d5 (Surr)	*69*		*26 - 120*	*05/08/18 14:14*	*05/09/18 14:25*	*1*
Phenol-d5 (Surr)	*32*		*11 - 120*	*05/08/18 14:14*	*05/09/18 14:25*	*1*
p-Terphenyl-d14	*115*		*64 - 127*	*05/08/18 14:14*	*05/09/18 14:25*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/10/18 22:55	1
1,2-Dichlorobenzene	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/10/18 22:55	1
1,3-Dichlorobenzene	<0.24		1.9	0.24	ug/L		05/09/18 14:20	05/10/18 22:55	1
1,4-Dichlorobenzene	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/10/18 22:55	1
1-Methylnaphthalene	<0.48		1.9	0.48	ug/L		05/09/18 14:20	05/10/18 22:55	1
bis(chloroisopropyl) ether	<0.29	^c	1.9	0.29	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,3,4,6-Tetrachlorophenol	<1.4		4.8	1.4	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4,5-Trichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4,6-Trichlorophenol	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4-Dichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4-Dinitrophenol	<7.1	^c	19	7.1	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4-Dinitrotoluene	<0.29		0.96	0.29	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,6-Dinitrotoluene	<0.11		0.96	0.11	ug/L		05/09/18 14:20	05/10/18 22:55	1
2-Chloronaphthalene	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 22:55	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-06A-050218
Date Collected: 05/02/18 15:44
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/10/18 22:55	1
2-Methylnaphthalene	<0.12		1.9	0.12	ug/L		05/09/18 14:20	05/10/18 22:55	1
2-Methylphenol	<0.30		1.9	0.30	ug/L		05/09/18 14:20	05/10/18 22:55	1
2-Nitroaniline	<1.0		4.8	1.0	ug/L		05/09/18 14:20	05/10/18 22:55	1
2-Nitrophenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/10/18 22:55	1
3-Nitroaniline	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 22:55	1
4,6-Dinitro-2-methylphenol	<4.7		19	4.7	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Bromophenyl phenyl ether	<0.87		4.8	0.87	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Chloro-3-methylphenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Chloroaniline	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Chlorophenyl phenyl ether	<0.78		4.8	0.78	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Nitroaniline	<3.8		9.6	3.8	ug/L		05/09/18 14:20	05/10/18 22:55	1
4-Nitrophenol	<2.2	^c	19	2.2	ug/L		05/09/18 14:20	05/10/18 22:55	1
Acenaphthene	<0.34		0.96	0.34	ug/L		05/09/18 14:20	05/10/18 22:55	1
Acenaphthylene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 22:55	1
Anthracene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzo[a]pyrene	<0.054		0.19	0.054	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzo[b]fluoranthene	<0.056		0.19	0.056	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzo[g,h,i]perylene	<0.40		0.96	0.40	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzo[k]fluoranthene	<0.071		0.19	0.071	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzoic acid	<4.4		19	4.4	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzyl alcohol	<2.9		19	2.9	ug/L		05/09/18 14:20	05/10/18 22:55	1
Bis(2-chloroethoxy)methane	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/10/18 22:55	1
Bis(2-chloroethyl)ether	<0.34		1.9	0.34	ug/L		05/09/18 14:20	05/10/18 22:55	1
Bis(2-ethylhexyl) phthalate	<2.3		9.6	2.3	ug/L		05/09/18 14:20	05/10/18 22:55	1
Butyl benzyl phthalate	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/10/18 22:55	1
Chrysene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 22:55	1
Dibenz(a,h)anthracene	<0.061		0.29	0.061	ug/L		05/09/18 14:20	05/10/18 22:55	1
Dibenzofuran	<0.34		1.9	0.34	ug/L		05/09/18 14:20	05/10/18 22:55	1
Diethyl phthalate	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/10/18 22:55	1
Dimethyl phthalate	<0.36		1.9	0.36	ug/L		05/09/18 14:20	05/10/18 22:55	1
Di-n-butyl phthalate	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/10/18 22:55	1
Di-n-octyl phthalate	<2.4		9.6	2.4	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,3,5,6-Tetrachlorophenol	<2.4		4.8	2.4	ug/L		05/09/18 14:20	05/10/18 22:55	1
Fluoranthene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 22:55	1
Fluorene	<0.36		0.96	0.36	ug/L		05/09/18 14:20	05/10/18 22:55	1
Hexachlorobenzene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 22:55	1
Hexachlorobutadiene	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/10/18 22:55	1
Hexachlorocyclopentadiene	<3.3		19	3.3	ug/L		05/09/18 14:20	05/10/18 22:55	1
Hexachloroethane	<0.93		4.8	0.93	ug/L		05/09/18 14:20	05/10/18 22:55	1
Indeno[1,2,3-cd]pyrene	<0.080		0.19	0.080	ug/L		05/09/18 14:20	05/10/18 22:55	1
Isophorone	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/10/18 22:55	1
Nitrobenzene	<0.43		0.96	0.43	ug/L		05/09/18 14:20	05/10/18 22:55	1
N-Nitrosodi-n-propylamine	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 22:55	1
N-Nitrosodiphenylamine	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 22:55	1
Phenol	<0.34		4.8	0.34	ug/L		05/09/18 14:20	05/10/18 22:55	1
Pyrene	<0.46		0.96	0.46	ug/L		05/09/18 14:20	05/10/18 22:55	1
2,4-Dimethylphenol	<3.2		9.6	3.2	ug/L		05/09/18 14:20	05/10/18 22:55	1
Benzo[a]anthracene	<0.042		0.19	0.042	ug/L		05/09/18 14:20	05/10/18 22:55	1

Client Sample ID: SUPE-W-06A-050218

Lab Sample ID: 480-135500-1

Date Collected: 05/02/18 15:44

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<0.34		0.96	0.34	ug/L		05/09/18 14:20	05/10/18 22:55	1
3,3'-Dichlorobenzidine	<0.90		4.8	0.90	ug/L		05/09/18 14:20	05/10/18 22:55	1
3 & 4 Methylphenol	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/10/18 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*109*		*40 - 145*	*05/09/18 14:20*	*05/10/18 22:55*	*1*
2-Fluorobiphenyl	*82*	*^c*	*34 - 110*	*05/09/18 14:20*	*05/10/18 22:55*	*1*
2-Fluorophenol (Surr)	*66*		*27 - 110*	*05/09/18 14:20*	*05/10/18 22:55*	*1*
Nitrobenzene-d5 (Surr)	*83*		*36 - 120*	*05/09/18 14:20*	*05/10/18 22:55*	*1*
Phenol-d5 (Surr)	*36*		*20 - 100*	*05/09/18 14:20*	*05/10/18 22:55*	*1*
Terphenyl-d14 (Surr)	*100*		*40 - 145*	*05/09/18 14:20*	*05/10/18 22:55*	*1*

Client Sample ID: SUPE-EB-01-050218

Lab Sample ID: 480-135500-2

Date Collected: 05/02/18 17:15

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/11/18 02:03	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/11/18 02:03	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/11/18 02:03	1
Benzene	<0.41		1.0	0.41	ug/L			05/11/18 02:03	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/11/18 02:03	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/11/18 02:03	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/11/18 02:03	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/11/18 02:03	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/11/18 02:03	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/11/18 02:03	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/11/18 02:03	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/11/18 02:03	1
Styrene	<0.73		1.0	0.73	ug/L			05/11/18 02:03	1
Toluene	<0.51		1.0	0.51	ug/L			05/11/18 02:03	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/11/18 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*05/11/18 02:03*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*05/11/18 02:03*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/11/18 02:03*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*05/11/18 02:03*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*24 - 146*	*05/08/18 14:14*	*05/09/18 14:54*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*05/08/18 14:14*	*05/09/18 14:54*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*05/08/18 14:14*	*05/09/18 14:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*26 - 120*	*05/08/18 14:14*	*05/09/18 14:54*	*1*
Phenol-d5 (Surr)	*31*		*11 - 120*	*05/08/18 14:14*	*05/09/18 14:54*	*1*
p-Terphenyl-d14	*112*		*64 - 127*	*05/08/18 14:14*	*05/09/18 14:54*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/10/18 23:19	1
1,2-Dichlorobenzene	<0.30		2.1	0.30	ug/L		05/09/18 14:20	05/10/18 23:19	1
1,3-Dichlorobenzene	<0.26		2.1	0.26	ug/L		05/09/18 14:20	05/10/18 23:19	1
1,4-Dichlorobenzene	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/10/18 23:19	1
1-Methylnaphthalene	<0.51		2.1	0.51	ug/L		05/09/18 14:20	05/10/18 23:19	1
bis(chloroisopropyl) ether	<0.31	^c	2.1	0.31	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,3,4,6-Tetrachlorophenol	<1.6		5.1	1.6	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4,5-Trichlorophenol	<2.4		10	2.4	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4,6-Trichlorophenol	<1.1		5.1	1.1	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4-Dinitrophenol	<7.6	^c	21	7.6	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4-Dinitrotoluene	<0.31		1.0	0.31	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Chloronaphthalene	<0.35		2.1	0.35	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Chlorophenol	<0.82		5.1	0.82	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Methylnaphthalene	<0.13		2.1	0.13	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Methylphenol	<0.32		2.1	0.32	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Nitroaniline	<1.1		5.1	1.1	ug/L		05/09/18 14:20	05/10/18 23:19	1
2-Nitrophenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/10/18 23:19	1
3-Nitroaniline	<2.4		10	2.4	ug/L		05/09/18 14:20	05/10/18 23:19	1
4,6-Dinitro-2-methylphenol	<5.1		21	5.1	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Bromophenyl phenyl ether	<0.94		5.1	0.94	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Chloro-3-methylphenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Chloroaniline	<2.2		10	2.2	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Chlorophenyl phenyl ether	<0.83		5.1	0.83	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Nitroaniline	<4.0		10	4.0	ug/L		05/09/18 14:20	05/10/18 23:19	1
4-Nitrophenol	<2.4	^c	21	2.4	ug/L		05/09/18 14:20	05/10/18 23:19	1
Acenaphthene	<0.37		1.0	0.37	ug/L		05/09/18 14:20	05/10/18 23:19	1
Acenaphthylene	<0.33		1.0	0.33	ug/L		05/09/18 14:20	05/10/18 23:19	1
Anthracene	<0.33		1.0	0.33	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzo[a]pyrene	<0.058		0.21	0.058	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzo[b]fluoranthene	<0.060		0.21	0.060	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzo[g,h,i]perylene	<0.43		1.0	0.43	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzo[k]fluoranthene	<0.076		0.21	0.076	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzoic acid	<4.7		21	4.7	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzyl alcohol	<3.1		21	3.1	ug/L		05/09/18 14:20	05/10/18 23:19	1
Bis(2-chloroethoxy)methane	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/10/18 23:19	1
Bis(2-chloroethyl)ether	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/10/18 23:19	1
Bis(2-ethylhexyl) phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/10/18 23:19	1
Butyl benzyl phthalate	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/10/18 23:19	1
Chrysene	<0.14		0.51	0.14	ug/L		05/09/18 14:20	05/10/18 23:19	1
Dibenz(a,h)anthracene	<0.066		0.31	0.066	ug/L		05/09/18 14:20	05/10/18 23:19	1
Dibenzofuran	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/10/18 23:19	1
Diethyl phthalate	<0.45		2.1	0.45	ug/L		05/09/18 14:20	05/10/18 23:19	1
Dimethyl phthalate	<0.39		2.1	0.39	ug/L		05/09/18 14:20	05/10/18 23:19	1
Di-n-butyl phthalate	<0.82		5.1	0.82	ug/L		05/09/18 14:20	05/10/18 23:19	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,3,5,6-Tetrachlorophenol	<2.6		5.1	2.6	ug/L		05/09/18 14:20	05/10/18 23:19	1
Fluoranthene	<0.33		1.0	0.33	ug/L		05/09/18 14:20	05/10/18 23:19	1
Fluorene	<0.39		1.0	0.39	ug/L		05/09/18 14:20	05/10/18 23:19	1
Hexachlorobenzene	<0.14		0.51	0.14	ug/L		05/09/18 14:20	05/10/18 23:19	1
Hexachlorobutadiene	<1.1		5.1	1.1	ug/L		05/09/18 14:20	05/10/18 23:19	1
Hexachlorocyclopentadiene	<3.5		21	3.5	ug/L		05/09/18 14:20	05/10/18 23:19	1

Client Sample ID: SUPE-EB-01-050218

Lab Sample ID: 480-135500-2
Date Collected: 05/02/18 17:15
Matrix: Water
Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<1.0		5.1	1.0	ug/L		05/09/18 14:20	05/10/18 23:19	1
Indeno[1,2,3-cd]pyrene	<0.086		0.21	0.086	ug/L		05/09/18 14:20	05/10/18 23:19	1
Isophorone	<0.30		2.1	0.30	ug/L		05/09/18 14:20	05/10/18 23:19	1
Nitrobenzene	<0.46		1.0	0.46	ug/L		05/09/18 14:20	05/10/18 23:19	1
N-Nitrosodi-n-propylamine	<0.14		0.51	0.14	ug/L		05/09/18 14:20	05/10/18 23:19	1
N-Nitrosodiphenylamine	<0.35		2.1	0.35	ug/L		05/09/18 14:20	05/10/18 23:19	1
Phenol	<0.37		5.1	0.37	ug/L		05/09/18 14:20	05/10/18 23:19	1
Pyrene	<0.49		1.0	0.49	ug/L		05/09/18 14:20	05/10/18 23:19	1
2,4-Dimethylphenol	<3.4		10	3.4	ug/L		05/09/18 14:20	05/10/18 23:19	1
Benzo[a]anthracene	<0.045		0.21	0.045	ug/L		05/09/18 14:20	05/10/18 23:19	1
Phenanthrene	<0.36		1.0	0.36	ug/L		05/09/18 14:20	05/10/18 23:19	1
3,3'-Dichlorobenzidine	<0.97		5.1	0.97	ug/L		05/09/18 14:20	05/10/18 23:19	1
3 & 4 Methylphenol	<0.45		2.1	0.45	ug/L		05/09/18 14:20	05/10/18 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*40 - 145*	*05/09/18 14:20*	*05/10/18 23:19*	*1*
2-Fluorobiphenyl	*73*	*^c*	*34 - 110*	*05/09/18 14:20*	*05/10/18 23:19*	*1*
2-Fluorophenol (Surr)	*68*		*27 - 110*	*05/09/18 14:20*	*05/10/18 23:19*	*1*
Nitrobenzene-d5 (Surr)	*76*		*36 - 120*	*05/09/18 14:20*	*05/10/18 23:19*	*1*
Phenol-d5 (Surr)	*38*		*20 - 100*	*05/09/18 14:20*	*05/10/18 23:19*	*1*
Terphenyl-d14 (Surr)	*99*		*40 - 145*	*05/09/18 14:20*	*05/10/18 23:19*	*1*

Client Sample ID: SUPE-W-06C-050318

Lab Sample ID: 480-135500-3
Date Collected: 05/03/18 09:25
Matrix: Water
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 01:48	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 01:48	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 01:48	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 01:48	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 01:48	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 01:48	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 01:48	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 01:48	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 01:48	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 01:48	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 01:48	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 01:48	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 01:48	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 01:48	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/12/18 01:48*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/12/18 01:48*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/12/18 01:48*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/12/18 01:48*	*1*

Client Sample ID: SUPE-W-06C-050318
Date Collected: 05/03/18 09:25
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*24 - 146*	*05/08/18 14:14*	*05/09/18 13:56*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*05/08/18 14:14*	*05/09/18 13:56*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*05/08/18 14:14*	*05/09/18 13:56*	*1*
Nitrobenzene-d5 (Surr)	*74*		*26 - 120*	*05/08/18 14:14*	*05/09/18 13:56*	*1*
Phenol-d5 (Surr)	*35*		*11 - 120*	*05/08/18 14:14*	*05/09/18 13:56*	*1*
p-Terphenyl-d14	*95*		*64 - 127*	*05/08/18 14:14*	*05/09/18 13:56*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/12/18 02:06	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 02:06	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/09/18 14:20	05/12/18 02:06	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/12/18 02:06	1
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/09/18 14:20	05/12/18 02:06	1
bis(chloroisopropyl) ether	<0.30	^c	2.0	0.30	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4,5-Trichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4-Dinitrophenol	<7.5	^c	20	7.5	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4-Dinitrotoluene	<0.30		1.0	0.30	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Chlorophenol	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Nitroaniline	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/12/18 02:06	1
2-Nitrophenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/12/18 02:06	1
3-Nitroaniline	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 02:06	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Bromophenyl phenyl ether	<0.92		5.0	0.92	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Chloro-3-methylphenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Chloroaniline	<2.1		10	2.1	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Chlorophenyl phenyl ether	<0.81		5.0	0.81	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Nitroaniline	<4.0		10	4.0	ug/L		05/09/18 14:20	05/12/18 02:06	1
4-Nitrophenol	<2.4	^c	20	2.4	ug/L		05/09/18 14:20	05/12/18 02:06	1
Acenaphthene	<0.36		1.0	0.36	ug/L		05/09/18 14:20	05/12/18 02:06	1
Acenaphthylene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 02:06	1
Anthracene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzo[g,h,i]perylene	<0.42		1.0	0.42	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzo[k]fluoranthene	<0.074		0.20	0.074	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzoic acid	<4.6		20	4.6	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzyl alcohol	<3.1		20	3.1	ug/L		05/09/18 14:20	05/12/18 02:06	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/12/18 02:06	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/12/18 02:06	1

Client Sample ID: SUPE-W-06C-050318

Lab Sample ID: 480-135500-3

Date Collected: 05/03/18 09:25

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<2.4		10	2.4	ug/L		05/09/18 14:20	05/12/18 02:06	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/12/18 02:06	1
Chrysene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 02:06	1
Dibenz(a,h)anthracene	<0.064		0.30	0.064	ug/L		05/09/18 14:20	05/12/18 02:06	1
Dibenzofuran	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/12/18 02:06	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/12/18 02:06	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/09/18 14:20	05/12/18 02:06	1
Di-n-butyl phthalate	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/12/18 02:06	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/09/18 14:20	05/12/18 02:06	1
Fluoranthene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 02:06	1
Fluorene	<0.38		1.0	0.38	ug/L		05/09/18 14:20	05/12/18 02:06	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 02:06	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/12/18 02:06	1
Hexachlorocyclopentadiene	<3.5	^c	20	3.5	ug/L		05/09/18 14:20	05/12/18 02:06	1
Hexachloroethane	<0.98		5.0	0.98	ug/L		05/09/18 14:20	05/12/18 02:06	1
Indeno[1,2,3-cd]pyrene	<0.084		0.20	0.084	ug/L		05/09/18 14:20	05/12/18 02:06	1
Isophorone	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 02:06	1
Nitrobenzene	<0.45		1.0	0.45	ug/L		05/09/18 14:20	05/12/18 02:06	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 02:06	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 02:06	1
Phenol	<0.36		5.0	0.36	ug/L		05/09/18 14:20	05/12/18 02:06	1
Pyrene	<0.48		1.0	0.48	ug/L		05/09/18 14:20	05/12/18 02:06	1
2,4-Dimethylphenol	<3.4		10	3.4	ug/L		05/09/18 14:20	05/12/18 02:06	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/09/18 14:20	05/12/18 02:06	1
Phenanthrene	<0.35		1.0	0.35	ug/L		05/09/18 14:20	05/12/18 02:06	1
3,3'-Dichlorobenzidine	<0.95		5.0	0.95	ug/L		05/09/18 14:20	05/12/18 02:06	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/12/18 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*40 - 145*	*05/09/18 14:20*	*05/12/18 02:06*	*1*
2-Fluorobiphenyl	*80*	*^c*	*34 - 110*	*05/09/18 14:20*	*05/12/18 02:06*	*1*
2-Fluorophenol (Surr)	*66*		*27 - 110*	*05/09/18 14:20*	*05/12/18 02:06*	*1*
Nitrobenzene-d5 (Surr)	*75*		*36 - 120*	*05/09/18 14:20*	*05/12/18 02:06*	*1*
Phenol-d5 (Surr)	*36*		*20 - 100*	*05/09/18 14:20*	*05/12/18 02:06*	*1*
Terphenyl-d14 (Surr)	*98*		*40 - 145*	*05/09/18 14:20*	*05/12/18 02:06*	*1*

Client Sample ID: SUPE-W-12A-050318

Lab Sample ID: 480-135500-4

Date Collected: 05/03/18 11:55

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 02:15	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 02:15	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 02:15	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 02:15	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 02:15	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 02:15	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 02:15	1

Client Sample ID: SUPE-W-12A-050318
Date Collected: 05/03/18 11:55
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 02:15	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 02:15	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 02:15	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 02:15	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 02:15	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 02:15	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 02:15	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/12/18 02:15*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/12/18 02:15*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/12/18 02:15*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/12/18 02:15*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*24 - 146*	*05/08/18 14:14*	*05/09/18 15:24*	*1*
2-Fluorobiphenyl	*80*		*37 - 120*	*05/08/18 14:14*	*05/09/18 15:24*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*05/08/18 14:14*	*05/09/18 15:24*	*1*
Nitrobenzene-d5 (Surr)	*63*		*26 - 120*	*05/08/18 14:14*	*05/09/18 15:24*	*1*
Phenol-d5 (Surr)	*28*		*11 - 120*	*05/08/18 14:14*	*05/09/18 15:24*	*1*
p-Terphenyl-d14	*75*		*64 - 127*	*05/08/18 14:14*	*05/09/18 15:24*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/10/18 23:44	1
1,2-Dichlorobenzene	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/10/18 23:44	1
1,3-Dichlorobenzene	<0.24		1.9	0.24	ug/L		05/09/18 14:20	05/10/18 23:44	1
1,4-Dichlorobenzene	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/10/18 23:44	1
1-Methylnaphthalene	<0.48		1.9	0.48	ug/L		05/09/18 14:20	05/10/18 23:44	1
bis(chloroisopropyl) ether	<0.29	^c	1.9	0.29	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,3,4,6-Tetrachlorophenol	<1.4		4.8	1.4	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4,5-Trichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4,6-Trichlorophenol	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4-Dichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4-Dinitrophenol	<7.1	^c	19	7.1	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4-Dinitrotoluene	<0.29		0.96	0.29	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,6-Dinitrotoluene	<0.11		0.96	0.11	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Chloronaphthalene	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Chlorophenol	<0.76		4.8	0.76	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Methylnaphthalene	<0.12		1.9	0.12	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Methylphenol	<0.30		1.9	0.30	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Nitroaniline	<1.0		4.8	1.0	ug/L		05/09/18 14:20	05/10/18 23:44	1
2-Nitrophenol	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/10/18 23:44	1
3-Nitroaniline	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/10/18 23:44	1
4,6-Dinitro-2-methylphenol	<4.7		19	4.7	ug/L		05/09/18 14:20	05/10/18 23:44	1

Client Sample ID: SUPE-W-12A-050318
Date Collected: 05/03/18 11:55
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.87		4.8	0.87	ug/L		05/09/18 14:20	05/10/18 23:44	1
4-Chloro-3-methylphenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/10/18 23:44	1
4-Chloroaniline	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/10/18 23:44	1
4-Chlorophenyl phenyl ether	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/10/18 23:44	1
4-Nitroaniline	<3.8		9.6	3.8	ug/L		05/09/18 14:20	05/10/18 23:44	1
4-Nitrophenol	<2.2	^c	19	2.2	ug/L		05/09/18 14:20	05/10/18 23:44	1
Acenaphthene	<0.34		0.96	0.34	ug/L		05/09/18 14:20	05/10/18 23:44	1
Acenaphthylene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 23:44	1
Anthracene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzo[a]pyrene	<0.054		0.19	0.054	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzo[b]fluoranthene	<0.055		0.19	0.055	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzo[g,h,i]perylene	<0.40		0.96	0.40	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzo[k]fluoranthene	<0.071		0.19	0.071	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzoic acid	<4.4		19	4.4	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzyl alcohol	<2.9		19	2.9	ug/L		05/09/18 14:20	05/10/18 23:44	1
Bis(2-chloroethoxy)methane	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/10/18 23:44	1
Bis(2-chloroethyl)ether	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 23:44	1
Bis(2-ethylhexyl) phthalate	<2.3		9.6	2.3	ug/L		05/09/18 14:20	05/10/18 23:44	1
Butyl benzyl phthalate	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/10/18 23:44	1
Chrysene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 23:44	1
Dibenz(a,h)anthracene	<0.061		0.29	0.061	ug/L		05/09/18 14:20	05/10/18 23:44	1
Dibenzofuran	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 23:44	1
Diethyl phthalate	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/10/18 23:44	1
Dimethyl phthalate	<0.36		1.9	0.36	ug/L		05/09/18 14:20	05/10/18 23:44	1
Di-n-butyl phthalate	<0.76		4.8	0.76	ug/L		05/09/18 14:20	05/10/18 23:44	1
Di-n-octyl phthalate	<2.4		9.6	2.4	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,3,5,6-Tetrachlorophenol	<2.4		4.8	2.4	ug/L		05/09/18 14:20	05/10/18 23:44	1
Fluoranthene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/10/18 23:44	1
Fluorene	<0.36		0.96	0.36	ug/L		05/09/18 14:20	05/10/18 23:44	1
Hexachlorobenzene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 23:44	1
Hexachlorobutadiene	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/10/18 23:44	1
Hexachlorocyclopentadiene	<3.3		19	3.3	ug/L		05/09/18 14:20	05/10/18 23:44	1
Hexachloroethane	<0.93		4.8	0.93	ug/L		05/09/18 14:20	05/10/18 23:44	1
Indeno[1,2,3-cd]pyrene	<0.080		0.19	0.080	ug/L		05/09/18 14:20	05/10/18 23:44	1
Isophorone	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/10/18 23:44	1
Nitrobenzene	<0.43		0.96	0.43	ug/L		05/09/18 14:20	05/10/18 23:44	1
N-Nitrosodi-n-propylamine	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/10/18 23:44	1
N-Nitrosodiphenylamine	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/10/18 23:44	1
Phenol	<0.34		4.8	0.34	ug/L		05/09/18 14:20	05/10/18 23:44	1
Pyrene	<0.46		0.96	0.46	ug/L		05/09/18 14:20	05/10/18 23:44	1
2,4-Dimethylphenol	<3.2		9.6	3.2	ug/L		05/09/18 14:20	05/10/18 23:44	1
Benzo[a]anthracene	<0.042		0.19	0.042	ug/L		05/09/18 14:20	05/10/18 23:44	1
Phenanthrene	<0.33		0.96	0.33	ug/L		05/09/18 14:20	05/10/18 23:44	1
3,3'-Dichlorobenzidine	<0.90		4.8	0.90	ug/L		05/09/18 14:20	05/10/18 23:44	1
3 & 4 Methylphenol	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/10/18 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*40 - 145*	*05/09/18 14:20*	*05/10/18 23:44*	*1*
2-Fluorobiphenyl	*76*	*^c*	*34 - 110*	*05/09/18 14:20*	*05/10/18 23:44*	*1*
2-Fluorophenol (Surr)	*49*		*27 - 110*	*05/09/18 14:20*	*05/10/18 23:44*	*1*

Client Sample ID: SUPE-W-12A-050318

Lab Sample ID: 480-135500-4

Date Collected: 05/03/18 11:55
Matrix: Water
Date Received: 05/05/18 09:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*	*05/09/18 14:20*	*05/10/18 23:44*	*1*
Phenol-d5 (Surr)	*27*		*20 - 100*	*05/09/18 14:20*	*05/10/18 23:44*	*1*
Terphenyl-d14 (Surr)	*82*		*40 - 145*	*05/09/18 14:20*	*05/10/18 23:44*	*1*

Client Sample ID: SUPE-W-12CR-050318

Lab Sample ID: 480-135500-5

Date Collected: 05/03/18 14:07
Matrix: Water
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 02:42	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 02:42	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 02:42	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 02:42	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 02:42	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 02:42	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 02:42	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 02:42	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 02:42	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 02:42	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 02:42	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 02:42	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 02:42	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 02:42	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/12/18 02:42*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/12/18 02:42*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/12/18 02:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/12/18 02:42*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*24 - 146*	*05/08/18 14:14*	*05/09/18 15:53*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*05/08/18 14:14*	*05/09/18 15:53*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*05/08/18 14:14*	*05/09/18 15:53*	*1*
Nitrobenzene-d5 (Surr)	*65*		*26 - 120*	*05/08/18 14:14*	*05/09/18 15:53*	*1*
Phenol-d5 (Surr)	*30*		*11 - 120*	*05/08/18 14:14*	*05/09/18 15:53*	*1*
p-Terphenyl-d14	*112*		*64 - 127*	*05/08/18 14:14*	*05/09/18 15:53*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/11/18 00:08	1
1,2-Dichlorobenzene	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/11/18 00:08	1
1,3-Dichlorobenzene	<0.24		1.9	0.24	ug/L		05/09/18 14:20	05/11/18 00:08	1
1,4-Dichlorobenzene	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/11/18 00:08	1

Client Sample ID: SUPE-W-12CR-050318
Date Collected: 05/03/18 14:07
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.48		1.9	0.48	ug/L		05/09/18 14:20	05/11/18 00:08	1
bis(chloroisopropyl) ether	<0.29	^c	1.9	0.29	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,3,4,6-Tetrachlorophenol	<1.4		4.8	1.4	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4,5-Trichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4,6-Trichlorophenol	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4-Dichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4-Dinitrophenol	<7.1	^c	19	7.1	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4-Dinitrotoluene	<0.29		0.96	0.29	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,6-Dinitrotoluene	<0.11		0.96	0.11	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Chloronaphthalene	<0.32		1.9	0.32	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Chlorophenol	<0.76		4.8	0.76	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Methylnaphthalene	<0.12		1.9	0.12	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Methylphenol	<0.30		1.9	0.30	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Nitroaniline	<1.0		4.8	1.0	ug/L		05/09/18 14:20	05/11/18 00:08	1
2-Nitrophenol	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/11/18 00:08	1
3-Nitroaniline	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/11/18 00:08	1
4,6-Dinitro-2-methylphenol	<4.7		19	4.7	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Bromophenyl phenyl ether	<0.87		4.8	0.87	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Chloro-3-methylphenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Chloroaniline	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Chlorophenyl phenyl ether	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Nitroaniline	<3.8		9.6	3.8	ug/L		05/09/18 14:20	05/11/18 00:08	1
4-Nitrophenol	<2.2	^c	19	2.2	ug/L		05/09/18 14:20	05/11/18 00:08	1
Acenaphthene	<0.34		0.96	0.34	ug/L		05/09/18 14:20	05/11/18 00:08	1
Acenaphthylene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/11/18 00:08	1
Anthracene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzo[a]pyrene	<0.053		0.19	0.053	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzo[b]fluoranthene	<0.055		0.19	0.055	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzo[g,h,i]perylene	<0.40		0.96	0.40	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzo[k]fluoranthene	<0.071		0.19	0.071	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzoic acid	<4.4		19	4.4	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzyl alcohol	<2.9		19	2.9	ug/L		05/09/18 14:20	05/11/18 00:08	1
Bis(2-chloroethoxy)methane	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/11/18 00:08	1
Bis(2-chloroethyl)ether	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/11/18 00:08	1
Bis(2-ethylhexyl) phthalate	<2.3		9.6	2.3	ug/L		05/09/18 14:20	05/11/18 00:08	1
Butyl benzyl phthalate	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/11/18 00:08	1
Chrysene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/11/18 00:08	1
Dibenz(a,h)anthracene	<0.061		0.29	0.061	ug/L		05/09/18 14:20	05/11/18 00:08	1
Dibenzofuran	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/11/18 00:08	1
Diethyl phthalate	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/11/18 00:08	1
Dimethyl phthalate	<0.36		1.9	0.36	ug/L		05/09/18 14:20	05/11/18 00:08	1
Di-n-butyl phthalate	<0.76		4.8	0.76	ug/L		05/09/18 14:20	05/11/18 00:08	1
Di-n-octyl phthalate	<2.4		9.6	2.4	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,3,5,6-Tetrachlorophenol	<2.4		4.8	2.4	ug/L		05/09/18 14:20	05/11/18 00:08	1
Fluoranthene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/11/18 00:08	1
Fluorene	<0.36		0.96	0.36	ug/L		05/09/18 14:20	05/11/18 00:08	1
Hexachlorobenzene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/11/18 00:08	1
Hexachlorobutadiene	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/11/18 00:08	1
Hexachlorocyclopentadiene	<3.3		19	3.3	ug/L		05/09/18 14:20	05/11/18 00:08	1

Client Sample ID: SUPE-W-12CR-050318

Lab Sample ID: 480-135500-5

Date Collected: 05/03/18 14:07

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.93		4.8	0.93	ug/L		05/09/18 14:20	05/11/18 00:08	1
Indeno[1,2,3-cd]pyrene	<0.080		0.19	0.080	ug/L		05/09/18 14:20	05/11/18 00:08	1
Isophorone	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/11/18 00:08	1
Nitrobenzene	<0.43		0.96	0.43	ug/L		05/09/18 14:20	05/11/18 00:08	1
N-Nitrosodi-n-propylamine	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/11/18 00:08	1
N-Nitrosodiphenylamine	<0.32		1.9	0.32	ug/L		05/09/18 14:20	05/11/18 00:08	1
Phenol	<0.34		4.8	0.34	ug/L		05/09/18 14:20	05/11/18 00:08	1
Pyrene	<0.46		0.96	0.46	ug/L		05/09/18 14:20	05/11/18 00:08	1
2,4-Dimethylphenol	<3.2		9.6	3.2	ug/L		05/09/18 14:20	05/11/18 00:08	1
Benzo[a]anthracene	<0.042		0.19	0.042	ug/L		05/09/18 14:20	05/11/18 00:08	1
Phenanthrene	<0.33		0.96	0.33	ug/L		05/09/18 14:20	05/11/18 00:08	1
3,3'-Dichlorobenzidine	<0.90		4.8	0.90	ug/L		05/09/18 14:20	05/11/18 00:08	1
3 & 4 Methylphenol	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/11/18 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*40 - 145*	*05/09/18 14:20*	*05/11/18 00:08*	*1*
2-Fluorobiphenyl	*57*	*^c*	*34 - 110*	*05/09/18 14:20*	*05/11/18 00:08*	*1*
2-Fluorophenol (Surr)	*43*		*27 - 110*	*05/09/18 14:20*	*05/11/18 00:08*	*1*
Nitrobenzene-d5 (Surr)	*55*		*36 - 120*	*05/09/18 14:20*	*05/11/18 00:08*	*1*
Phenol-d5 (Surr)	*21*		*20 - 100*	*05/09/18 14:20*	*05/11/18 00:08*	*1*
Terphenyl-d14 (Surr)	*67*		*40 - 145*	*05/09/18 14:20*	*05/11/18 00:08*	*1*

Client Sample ID: SUPE-EB-02-050318

Lab Sample ID: 480-135500-6

Date Collected: 05/03/18 14:42

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 03:09	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 03:09	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 03:09	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 03:09	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 03:09	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 03:09	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 03:09	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 03:09	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 03:09	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 03:09	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 03:09	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 03:09	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 03:09	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 03:09	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/12/18 03:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/12/18 03:09*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/12/18 03:09*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/12/18 03:09*	*1*

Client Sample ID: SUPE-EB-02-050318
Date Collected: 05/03/18 14:42
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*24 - 146*	*05/08/18 14:14*	*05/09/18 16:22*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*05/08/18 14:14*	*05/09/18 16:22*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*05/08/18 14:14*	*05/09/18 16:22*	*1*
Nitrobenzene-d5 (Surr)	*75*		*26 - 120*	*05/08/18 14:14*	*05/09/18 16:22*	*1*
Phenol-d5 (Surr)	*35*		*11 - 120*	*05/08/18 14:14*	*05/09/18 16:22*	*1*
p-Terphenyl-d14	*113*		*64 - 127*	*05/08/18 14:14*	*05/09/18 16:22*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.32		2.1	0.32	ug/L		05/09/18 14:20	05/12/18 21:44	1
1,2-Dichlorobenzene	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/12/18 21:44	1
1,3-Dichlorobenzene	<0.26		2.1	0.26	ug/L		05/09/18 14:20	05/12/18 21:44	1
1,4-Dichlorobenzene	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/12/18 21:44	1
1-Methylnaphthalene	<0.53		2.1	0.53	ug/L		05/09/18 14:20	05/12/18 21:44	1
bis(chloroisopropyl) ether	<0.32	^c	2.1	0.32	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,3,4,6-Tetrachlorophenol	<1.6		5.3	1.6	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4,5-Trichlorophenol	<2.4		11	2.4	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4,6-Trichlorophenol	<1.2		5.3	1.2	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4-Dichlorophenol	<2.4		11	2.4	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4-Dinitrophenol	<7.8		21	7.8	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4-Dinitrotoluene	<0.32		1.1	0.32	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,6-Dinitrotoluene	<0.13		1.1	0.13	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Chloronaphthalene	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Chlorophenol	<0.84		5.3	0.84	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Methylnaphthalene	<0.14		2.1	0.14	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Methylphenol	<0.33		2.1	0.33	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Nitroaniline	<1.1	^c	5.3	1.1	ug/L		05/09/18 14:20	05/12/18 21:44	1
2-Nitrophenol	<2.3		11	2.3	ug/L		05/09/18 14:20	05/12/18 21:44	1
3-Nitroaniline	<2.4		11	2.4	ug/L		05/09/18 14:20	05/12/18 21:44	1
4,6-Dinitro-2-methylphenol	<5.2		21	5.2	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Bromophenyl phenyl ether	<0.96		5.3	0.96	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Chloro-3-methylphenol	<2.3		11	2.3	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Chloroaniline	<2.2		11	2.2	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Chlorophenyl phenyl ether	<0.85		5.3	0.85	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Nitroaniline	<4.1		11	4.1	ug/L		05/09/18 14:20	05/12/18 21:44	1
4-Nitrophenol	<2.5		21	2.5	ug/L		05/09/18 14:20	05/12/18 21:44	1
Acenaphthene	<0.38		1.1	0.38	ug/L		05/09/18 14:20	05/12/18 21:44	1
Acenaphthylene	<0.34		1.1	0.34	ug/L		05/09/18 14:20	05/12/18 21:44	1
Anthracene	<0.34		1.1	0.34	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzo[a]pyrene	<0.059		0.21	0.059	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzo[b]fluoranthene	<0.061		0.21	0.061	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzo[g,h,i]perylene	<0.44		1.1	0.44	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzo[k]fluoranthene	<0.078		0.21	0.078	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzoic acid	<4.8	^c	21	4.8	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzyl alcohol	<3.2		21	3.2	ug/L		05/09/18 14:20	05/12/18 21:44	1
Bis(2-chloroethoxy)methane	<0.32		2.1	0.32	ug/L		05/09/18 14:20	05/12/18 21:44	1
Bis(2-chloroethyl)ether	<0.37		2.1	0.37	ug/L		05/09/18 14:20	05/12/18 21:44	1

Client Sample ID: SUPE-EB-02-050318

Lab Sample ID: 480-135500-6

Date Collected: 05/03/18 14:42

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<2.6		11	2.6	ug/L		05/09/18 14:20	05/12/18 21:44	1
Butyl benzyl phthalate	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/12/18 21:44	1
Chrysene	<0.15		0.53	0.15	ug/L		05/09/18 14:20	05/12/18 21:44	1
Dibenz(a,h)anthracene	<0.067		0.32	0.067	ug/L		05/09/18 14:20	05/12/18 21:44	1
Dibenzofuran	<0.37		2.1	0.37	ug/L		05/09/18 14:20	05/12/18 21:44	1
Diethyl phthalate	<0.46		2.1	0.46	ug/L		05/09/18 14:20	05/12/18 21:44	1
Dimethyl phthalate	<0.40		2.1	0.40	ug/L		05/09/18 14:20	05/12/18 21:44	1
Di-n-butyl phthalate	<0.84		5.3	0.84	ug/L		05/09/18 14:20	05/12/18 21:44	1
Di-n-octyl phthalate	<2.6		11	2.6	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,3,5,6-Tetrachlorophenol	<2.6		5.3	2.6	ug/L		05/09/18 14:20	05/12/18 21:44	1
Fluoranthene	<0.34		1.1	0.34	ug/L		05/09/18 14:20	05/12/18 21:44	1
Fluorene	<0.40		1.1	0.40	ug/L		05/09/18 14:20	05/12/18 21:44	1
Hexachlorobenzene	<0.15		0.53	0.15	ug/L		05/09/18 14:20	05/12/18 21:44	1
Hexachlorobutadiene	<1.2		5.3	1.2	ug/L		05/09/18 14:20	05/12/18 21:44	1
Hexachlorocyclopentadiene	<3.6		21	3.6	ug/L		05/09/18 14:20	05/12/18 21:44	1
Hexachloroethane	<1.0		5.3	1.0	ug/L		05/09/18 14:20	05/12/18 21:44	1
Indeno[1,2,3-cd]pyrene	<0.088		0.21	0.088	ug/L		05/09/18 14:20	05/12/18 21:44	1
Isophorone	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/12/18 21:44	1
Nitrobenzene	<0.47		1.1	0.47	ug/L		05/09/18 14:20	05/12/18 21:44	1
N-Nitrosodi-n-propylamine	<0.15		0.53	0.15	ug/L		05/09/18 14:20	05/12/18 21:44	1
N-Nitrosodiphenylamine	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/12/18 21:44	1
Phenol	<0.38	^c	5.3	0.38	ug/L		05/09/18 14:20	05/12/18 21:44	1
Pyrene	<0.50		1.1	0.50	ug/L		05/09/18 14:20	05/12/18 21:44	1
2,4-Dimethylphenol	<3.5		11	3.5	ug/L		05/09/18 14:20	05/12/18 21:44	1
Benzo[a]anthracene	<0.046		0.21	0.046	ug/L		05/09/18 14:20	05/12/18 21:44	1
Phenanthrene	<0.37		1.1	0.37	ug/L		05/09/18 14:20	05/12/18 21:44	1
3,3'-Dichlorobenzidine	<0.99		5.3	0.99	ug/L		05/09/18 14:20	05/12/18 21:44	1
3 & 4 Methylphenol	<0.46		2.1	0.46	ug/L		05/09/18 14:20	05/12/18 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*40 - 145*	*05/09/18 14:20*	*05/12/18 21:44*	*1*
2-Fluorobiphenyl	*103*		*34 - 110*	*05/09/18 14:20*	*05/12/18 21:44*	*1*
2-Fluorophenol (Surr)	*71*		*27 - 110*	*05/09/18 14:20*	*05/12/18 21:44*	*1*
Nitrobenzene-d5 (Surr)	*109*		*36 - 120*	*05/09/18 14:20*	*05/12/18 21:44*	*1*
Phenol-d5 (Surr)	*38*		*20 - 100*	*05/09/18 14:20*	*05/12/18 21:44*	*1*
Terphenyl-d14 (Surr)	*110*		*40 - 145*	*05/09/18 14:20*	*05/12/18 21:44*	*1*

Client Sample ID: SUPE-W-30A-050318

Lab Sample ID: 480-135500-7

Date Collected: 05/03/18 15:40

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 03:36	1
1,2,4-Trimethylbenzene	**4.5**		1.0	0.75	ug/L			05/12/18 03:36	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 03:36	1
Benzene	**8.9**		1.0	0.41	ug/L			05/12/18 03:36	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 03:36	1
Ethylbenzene	**22**		1.0	0.74	ug/L			05/12/18 03:36	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 03:36	1

Client Sample ID: SUPE-W-30A-050318
Date Collected: 05/03/18 15:40
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	**2.8**		2.0	0.66	ug/L			05/12/18 03:36	1
Naphthalene	**29**		1.0	0.43	ug/L			05/12/18 03:36	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 03:36	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 03:36	1
o-Xylene	**3.9**		1.0	0.76	ug/L			05/12/18 03:36	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 03:36	1
Toluene	**0.75**	**J**	1.0	0.51	ug/L			05/12/18 03:36	1
Xylenes, Total	**6.7**		2.0	0.66	ug/L			05/12/18 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/12/18 03:36*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/12/18 03:36*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/12/18 03:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/12/18 03:36*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*24 - 146*	*05/08/18 14:14*	*05/09/18 16:52*	*1*
2-Fluorobiphenyl	*74*		*37 - 120*	*05/08/18 14:14*	*05/09/18 16:52*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*05/08/18 14:14*	*05/09/18 16:52*	*1*
Nitrobenzene-d5 (Surr)	*59*		*26 - 120*	*05/08/18 14:14*	*05/09/18 16:52*	*1*
Phenol-d5 (Surr)	*27*		*11 - 120*	*05/08/18 14:14*	*05/09/18 16:52*	*1*
p-Terphenyl-d14	*77*		*64 - 127*	*05/08/18 14:14*	*05/09/18 16:52*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/12/18 22:12	1
1,2-Dichlorobenzene	<0.30		2.1	0.30	ug/L		05/09/18 14:20	05/12/18 22:12	1
1,3-Dichlorobenzene	<0.26		2.1	0.26	ug/L		05/09/18 14:20	05/12/18 22:12	1
1,4-Dichlorobenzene	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/12/18 22:12	1
1-Methylnaphthalene	<0.52		2.1	0.52	ug/L		05/09/18 14:20	05/12/18 22:12	1
bis(chloroisopropyl) ether	<0.31	^c	2.1	0.31	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,3,4,6-Tetrachlorophenol	<1.6		5.2	1.6	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4,5-Trichlorophenol	<2.4		10	2.4	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4,6-Trichlorophenol	<1.2		5.2	1.2	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4-Dichlorophenol	<2.4		10	2.4	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4-Dinitrophenol	<7.8		21	7.8	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4-Dinitrotoluene	<0.31		1.0	0.31	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,6-Dinitrotoluene	<0.13		1.0	0.13	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Chloronaphthalene	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Chlorophenol	<0.84		5.2	0.84	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Methylnaphthalene	<0.14		2.1	0.14	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Methylphenol	<0.33		2.1	0.33	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Nitroaniline	<1.1	^c	5.2	1.1	ug/L		05/09/18 14:20	05/12/18 22:12	1
2-Nitrophenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/12/18 22:12	1
3-Nitroaniline	<2.4		10	2.4	ug/L		05/09/18 14:20	05/12/18 22:12	1
4,6-Dinitro-2-methylphenol	<5.2		21	5.2	ug/L		05/09/18 14:20	05/12/18 22:12	1

Client Sample ID: SUPE-W-30A-050318
Date Collected: 05/03/18 15:40
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.96		5.2	0.96	ug/L		05/09/18 14:20	05/12/18 22:12	1
4-Chloro-3-methylphenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 22:12	1
4-Chloroaniline	<2.2		10	2.2	ug/L		05/09/18 14:20	05/12/18 22:12	1
4-Chlorophenyl phenyl ether	<0.85		5.2	0.85	ug/L		05/09/18 14:20	05/12/18 22:12	1
4-Nitroaniline	<4.1		10	4.1	ug/L		05/09/18 14:20	05/12/18 22:12	1
4-Nitrophenol	<2.5		21	2.5	ug/L		05/09/18 14:20	05/12/18 22:12	1
Acenaphthene	**15**		1.0	0.38	ug/L		05/09/18 14:20	05/12/18 22:12	1
Acenaphthylene	**0.49**	**J**	1.0	0.34	ug/L		05/09/18 14:20	05/12/18 22:12	1
Anthracene	**0.47**	**J**	1.0	0.34	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzo[a]pyrene	<0.059		0.21	0.059	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzo[b]fluoranthene	<0.061		0.21	0.061	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzo[g,h,i]perylene	<0.44		1.0	0.44	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzo[k]fluoranthene	<0.078		0.21	0.078	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzoic acid	<4.8	^c	21	4.8	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzyl alcohol	<3.2		21	3.2	ug/L		05/09/18 14:20	05/12/18 22:12	1
Bis(2-chloroethoxy)methane	<0.31		2.1	0.31	ug/L		05/09/18 14:20	05/12/18 22:12	1
Bis(2-chloroethyl)ether	<0.37		2.1	0.37	ug/L		05/09/18 14:20	05/12/18 22:12	1
Bis(2-ethylhexyl) phthalate	<2.6		10	2.6	ug/L		05/09/18 14:20	05/12/18 22:12	1
Butyl benzyl phthalate	<0.28		2.1	0.28	ug/L		05/09/18 14:20	05/12/18 22:12	1
Chrysene	<0.15		0.52	0.15	ug/L		05/09/18 14:20	05/12/18 22:12	1
Dibenz(a,h)anthracene	<0.067		0.31	0.067	ug/L		05/09/18 14:20	05/12/18 22:12	1
Dibenzofuran	**2.1**		2.1	0.37	ug/L		05/09/18 14:20	05/12/18 22:12	1
Diethyl phthalate	<0.46		2.1	0.46	ug/L		05/09/18 14:20	05/12/18 22:12	1
Dimethyl phthalate	<0.40		2.1	0.40	ug/L		05/09/18 14:20	05/12/18 22:12	1
Di-n-butyl phthalate	<0.84		5.2	0.84	ug/L		05/09/18 14:20	05/12/18 22:12	1
Di-n-octyl phthalate	<2.6		10	2.6	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,3,5,6-Tetrachlorophenol	<2.6		5.2	2.6	ug/L		05/09/18 14:20	05/12/18 22:12	1
Fluoranthene	**0.58**	**J**	1.0	0.34	ug/L		05/09/18 14:20	05/12/18 22:12	1
Fluorene	**1.2**		1.0	0.40	ug/L		05/09/18 14:20	05/12/18 22:12	1
Hexachlorobenzene	<0.15		0.52	0.15	ug/L		05/09/18 14:20	05/12/18 22:12	1
Hexachlorobutadiene	<1.2		5.2	1.2	ug/L		05/09/18 14:20	05/12/18 22:12	1
Hexachlorocyclopentadiene	<3.6		21	3.6	ug/L		05/09/18 14:20	05/12/18 22:12	1
Hexachloroethane	<1.0		5.2	1.0	ug/L		05/09/18 14:20	05/12/18 22:12	1
Indeno[1,2,3-cd]pyrene	<0.088		0.21	0.088	ug/L		05/09/18 14:20	05/12/18 22:12	1
Isophorone	<0.30		2.1	0.30	ug/L		05/09/18 14:20	05/12/18 22:12	1
Nitrobenzene	<0.47		1.0	0.47	ug/L		05/09/18 14:20	05/12/18 22:12	1
N-Nitrosodi-n-propylamine	<0.15		0.52	0.15	ug/L		05/09/18 14:20	05/12/18 22:12	1
N-Nitrosodiphenylamine	<0.36		2.1	0.36	ug/L		05/09/18 14:20	05/12/18 22:12	1
Phenol	<0.38	^c	5.2	0.38	ug/L		05/09/18 14:20	05/12/18 22:12	1
Pyrene	**0.57**	**J**	1.0	0.50	ug/L		05/09/18 14:20	05/12/18 22:12	1
2,4-Dimethylphenol	<3.5		10	3.5	ug/L		05/09/18 14:20	05/12/18 22:12	1
Benzo[a]anthracene	**0.16**	**J**	0.21	0.046	ug/L		05/09/18 14:20	05/12/18 22:12	1
Phenanthrene	<0.37		1.0	0.37	ug/L		05/09/18 14:20	05/12/18 22:12	1
3,3'-Dichlorobenzidine	<0.99		5.2	0.99	ug/L		05/09/18 14:20	05/12/18 22:12	1
3 & 4 Methylphenol	<0.46		2.1	0.46	ug/L		05/09/18 14:20	05/12/18 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*40 - 145*	*05/09/18 14:20*	*05/12/18 22:12*	*1*
2-Fluorobiphenyl	*98*		*34 - 110*	*05/09/18 14:20*	*05/12/18 22:12*	*1*
2-Fluorophenol (Surr)	*75*		*27 - 110*	*05/09/18 14:20*	*05/12/18 22:12*	*1*

Client Sample ID: SUPE-W-30A-050318

Lab Sample ID: 480-135500-7

Date Collected: 05/03/18 15:40
Matrix: Water
Date Received: 05/05/18 09:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*109*		*36 - 120*	*05/09/18 14:20*	*05/12/18 22:12*	*1*
Phenol-d5 (Surr)	*45*		*20 - 100*	*05/09/18 14:20*	*05/12/18 22:12*	*1*
Terphenyl-d14 (Surr)	*82*		*40 - 145*	*05/09/18 14:20*	*05/12/18 22:12*	*1*

Client Sample ID: SUPE-W-30C-050318

Lab Sample ID: 480-135500-8

Date Collected: 05/02/18 15:52
Matrix: Water
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/11/18 02:27	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/11/18 02:27	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/11/18 02:27	1
Benzene	<0.41		1.0	0.41	ug/L			05/11/18 02:27	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/11/18 02:27	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/11/18 02:27	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/11/18 02:27	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/11/18 02:27	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/11/18 02:27	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/11/18 02:27	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/11/18 02:27	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/11/18 02:27	1
Styrene	<0.73		1.0	0.73	ug/L			05/11/18 02:27	1
Toluene	<0.51		1.0	0.51	ug/L			05/11/18 02:27	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/11/18 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*05/11/18 02:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*05/11/18 02:27*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/11/18 02:27*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*05/11/18 02:27*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*24 - 146*	*05/08/18 14:14*	*05/09/18 17:21*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*05/08/18 14:14*	*05/09/18 17:21*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*05/08/18 14:14*	*05/09/18 17:21*	*1*
Nitrobenzene-d5 (Surr)	*67*		*26 - 120*	*05/08/18 14:14*	*05/09/18 17:21*	*1*
Phenol-d5 (Surr)	*31*		*11 - 120*	*05/08/18 14:14*	*05/09/18 17:21*	*1*
p-Terphenyl-d14	*114*		*64 - 127*	*05/08/18 14:14*	*05/09/18 17:21*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 22:40	1
1,2-Dichlorobenzene	<0.28		2.0	0.28	ug/L		05/09/18 14:20	05/12/18 22:40	1
1,3-Dichlorobenzene	<0.24		2.0	0.24	ug/L		05/09/18 14:20	05/12/18 22:40	1
1,4-Dichlorobenzene	<0.26		2.0	0.26	ug/L		05/09/18 14:20	05/12/18 22:40	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-30C-050318
Date Collected: 05/02/18 15:52
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.49		2.0	0.49	ug/L		05/09/18 14:20	05/12/18 22:40	1
bis(chloroisopropyl) ether	<0.29	^c	2.0	0.29	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,3,4,6-Tetrachlorophenol	<1.5		4.9	1.5	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4,5-Trichlorophenol	<2.2		9.8	2.2	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4,6-Trichlorophenol	<1.1		4.9	1.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4-Dichlorophenol	<2.2		9.8	2.2	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4-Dinitrophenol	<7.3		20	7.3	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4-Dinitrotoluene	<0.29		0.98	0.29	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,6-Dinitrotoluene	<0.12		0.98	0.12	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Chloronaphthalene	<0.33		2.0	0.33	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Chlorophenol	<0.78		4.9	0.78	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Methylphenol	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Nitroaniline	<1.1	^c	4.9	1.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
2-Nitrophenol	<2.1		9.8	2.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
3-Nitroaniline	<2.2		9.8	2.2	ug/L		05/09/18 14:20	05/12/18 22:40	1
4,6-Dinitro-2-methylphenol	<4.8		20	4.8	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Bromophenyl phenyl ether	<0.89		4.9	0.89	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Chloro-3-methylphenol	<2.1		9.8	2.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Chloroaniline	<2.1		9.8	2.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Chlorophenyl phenyl ether	<0.79		4.9	0.79	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Nitroaniline	<3.8		9.8	3.8	ug/L		05/09/18 14:20	05/12/18 22:40	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/09/18 14:20	05/12/18 22:40	1
Acenaphthene	<0.35		0.98	0.35	ug/L		05/09/18 14:20	05/12/18 22:40	1
Acenaphthylene	<0.31		0.98	0.31	ug/L		05/09/18 14:20	05/12/18 22:40	1
Anthracene	<0.31		0.98	0.31	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzo[a]pyrene	<0.055		0.20	0.055	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzo[b]fluoranthene	<0.057		0.20	0.057	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzo[g,h,i]perylene	<0.41		0.98	0.41	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzo[k]fluoranthene	<0.072		0.20	0.072	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzoic acid	<4.5	^c	20	4.5	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzyl alcohol	<3.0		20	3.0	ug/L		05/09/18 14:20	05/12/18 22:40	1
Bis(2-chloroethoxy)methane	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 22:40	1
Bis(2-chloroethyl)ether	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 22:40	1
Bis(2-ethylhexyl) phthalate	<2.4		9.8	2.4	ug/L		05/09/18 14:20	05/12/18 22:40	1
Butyl benzyl phthalate	<0.26		2.0	0.26	ug/L		05/09/18 14:20	05/12/18 22:40	1
Chrysene	<0.14		0.49	0.14	ug/L		05/09/18 14:20	05/12/18 22:40	1
Dibenz(a,h)anthracene	<0.062		0.29	0.062	ug/L		05/09/18 14:20	05/12/18 22:40	1
Dibenzofuran	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 22:40	1
Diethyl phthalate	<0.43		2.0	0.43	ug/L		05/09/18 14:20	05/12/18 22:40	1
Dimethyl phthalate	<0.37		2.0	0.37	ug/L		05/09/18 14:20	05/12/18 22:40	1
Di-n-butyl phthalate	<0.78		4.9	0.78	ug/L		05/09/18 14:20	05/12/18 22:40	1
Di-n-octyl phthalate	<2.4		9.8	2.4	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,3,5,6-Tetrachlorophenol	<2.4		4.9	2.4	ug/L		05/09/18 14:20	05/12/18 22:40	1
Fluoranthene	<0.31		0.98	0.31	ug/L		05/09/18 14:20	05/12/18 22:40	1
Fluorene	<0.37		0.98	0.37	ug/L		05/09/18 14:20	05/12/18 22:40	1
Hexachlorobenzene	<0.14		0.49	0.14	ug/L		05/09/18 14:20	05/12/18 22:40	1
Hexachlorobutadiene	<1.1		4.9	1.1	ug/L		05/09/18 14:20	05/12/18 22:40	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/09/18 14:20	05/12/18 22:40	1

Client Sample ID: SUPE-W-30C-050318

Lab Sample ID: 480-135500-8
Matrix: Water
Date Collected: 05/02/18 15:52
Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.95		4.9	0.95	ug/L		05/09/18 14:20	05/12/18 22:40	1
Indeno[1,2,3-cd]pyrene	<0.082		0.20	0.082	ug/L		05/09/18 14:20	05/12/18 22:40	1
Isophorone	<0.28		2.0	0.28	ug/L		05/09/18 14:20	05/12/18 22:40	1
Nitrobenzene	<0.44		0.98	0.44	ug/L		05/09/18 14:20	05/12/18 22:40	1
N-Nitrosodi-n-propylamine	<0.14		0.49	0.14	ug/L		05/09/18 14:20	05/12/18 22:40	1
N-Nitrosodiphenylamine	<0.33		2.0	0.33	ug/L		05/09/18 14:20	05/12/18 22:40	1
Phenol	<0.35	^c	4.9	0.35	ug/L		05/09/18 14:20	05/12/18 22:40	1
Pyrene	<0.47		0.98	0.47	ug/L		05/09/18 14:20	05/12/18 22:40	1
2,4-Dimethylphenol	<3.3		9.8	3.3	ug/L		05/09/18 14:20	05/12/18 22:40	1
Benzo[a]anthracene	<0.043		0.20	0.043	ug/L		05/09/18 14:20	05/12/18 22:40	1
Phenanthrene	<0.34		0.98	0.34	ug/L		05/09/18 14:20	05/12/18 22:40	1
3,3'-Dichlorobenzidine	<0.92		4.9	0.92	ug/L		05/09/18 14:20	05/12/18 22:40	1
3 & 4 Methylphenol	<0.43		2.0	0.43	ug/L		05/09/18 14:20	05/12/18 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*40 - 145*	*05/09/18 14:20*	*05/12/18 22:40*	*1*
2-Fluorobiphenyl	*102*		*34 - 110*	*05/09/18 14:20*	*05/12/18 22:40*	*1*
2-Fluorophenol (Surr)	*63*		*27 - 110*	*05/09/18 14:20*	*05/12/18 22:40*	*1*
Nitrobenzene-d5 (Surr)	*111*		*36 - 120*	*05/09/18 14:20*	*05/12/18 22:40*	*1*
Phenol-d5 (Surr)	*33*		*20 - 100*	*05/09/18 14:20*	*05/12/18 22:40*	*1*
Terphenyl-d14 (Surr)	*106*		*40 - 145*	*05/09/18 14:20*	*05/12/18 22:40*	*1*

Client Sample ID: SUPE-W-99-050318

Lab Sample ID: 480-135500-9
Matrix: Water
Date Collected: 05/03/18 01:01
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 04:03	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 04:03	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 04:03	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 04:03	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 04:03	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 04:03	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 04:03	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 04:03	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 04:03	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 04:03	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 04:03	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 04:03	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 04:03	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 04:03	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/12/18 04:03*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*05/12/18 04:03*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/12/18 04:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/12/18 04:03*	*1*

Client Sample ID: SUPE-W-99-050318
Date Collected: 05/03/18 01:01
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*24 - 146*	*05/08/18 14:14*	*05/09/18 17:50*	*1*
2-Fluorobiphenyl	*92*		*37 - 120*	*05/08/18 14:14*	*05/09/18 17:50*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*05/08/18 14:14*	*05/09/18 17:50*	*1*
Nitrobenzene-d5 (Surr)	*72*		*26 - 120*	*05/08/18 14:14*	*05/09/18 17:50*	*1*
Phenol-d5 (Surr)	*31*		*11 - 120*	*05/08/18 14:14*	*05/09/18 17:50*	*1*
p-Terphenyl-d14	*115*		*64 - 127*	*05/08/18 14:14*	*05/09/18 17:50*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/12/18 23:07	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 23:07	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/09/18 14:20	05/12/18 23:07	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/12/18 23:07	1
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/09/18 14:20	05/12/18 23:07	1
bis(chloroisopropyl) ether	<0.30	^c	2.0	0.30	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4,5-Trichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4-Dinitrophenol	<7.4		20	7.4	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4-Dinitrotoluene	<0.30		1.0	0.30	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Chlorophenol	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Nitroaniline	<1.1	^c	5.0	1.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
2-Nitrophenol	<2.1		10	2.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
3-Nitroaniline	<2.3		10	2.3	ug/L		05/09/18 14:20	05/12/18 23:07	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Bromophenyl phenyl ether	<0.91		5.0	0.91	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Chloro-3-methylphenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Chloroaniline	<2.1		10	2.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Chlorophenyl phenyl ether	<0.81		5.0	0.81	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Nitroaniline	<3.9		10	3.9	ug/L		05/09/18 14:20	05/12/18 23:07	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/09/18 14:20	05/12/18 23:07	1
Acenaphthene	<0.36		1.0	0.36	ug/L		05/09/18 14:20	05/12/18 23:07	1
Acenaphthylene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 23:07	1
Anthracene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzo[g,h,i]perylene	<0.42		1.0	0.42	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzo[k]fluoranthene	<0.074		0.20	0.074	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzoic acid	<4.6	^c	20	4.6	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzyl alcohol	<3.1		20	3.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/12/18 23:07	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/12/18 23:07	1

Client Sample ID: SUPE-W-99-050318

Lab Sample ID: 480-135500-9

Date Collected: 05/03/18 01:01

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<2.4		10	2.4	ug/L		05/09/18 14:20	05/12/18 23:07	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/12/18 23:07	1
Chrysene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 23:07	1
Dibenz(a,h)anthracene	<0.064		0.30	0.064	ug/L		05/09/18 14:20	05/12/18 23:07	1
Dibenzofuran	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/12/18 23:07	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/12/18 23:07	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/09/18 14:20	05/12/18 23:07	1
Di-n-butyl phthalate	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/12/18 23:07	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/09/18 14:20	05/12/18 23:07	1
Fluoranthene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/12/18 23:07	1
Fluorene	<0.38		1.0	0.38	ug/L		05/09/18 14:20	05/12/18 23:07	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 23:07	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/12/18 23:07	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/09/18 14:20	05/12/18 23:07	1
Hexachloroethane	<0.97		5.0	0.97	ug/L		05/09/18 14:20	05/12/18 23:07	1
Indeno[1,2,3-cd]pyrene	<0.084		0.20	0.084	ug/L		05/09/18 14:20	05/12/18 23:07	1
Isophorone	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/12/18 23:07	1
Nitrobenzene	<0.45		1.0	0.45	ug/L		05/09/18 14:20	05/12/18 23:07	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/12/18 23:07	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/12/18 23:07	1
Phenol	<0.36	^c	5.0	0.36	ug/L		05/09/18 14:20	05/12/18 23:07	1
Pyrene	<0.48		1.0	0.48	ug/L		05/09/18 14:20	05/12/18 23:07	1
2,4-Dimethylphenol	<3.3		10	3.3	ug/L		05/09/18 14:20	05/12/18 23:07	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/09/18 14:20	05/12/18 23:07	1
Phenanthrene	<0.35		1.0	0.35	ug/L		05/09/18 14:20	05/12/18 23:07	1
3,3'-Dichlorobenzidine	<0.94		5.0	0.94	ug/L		05/09/18 14:20	05/12/18 23:07	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/12/18 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*119*		*40 - 145*	*05/09/18 14:20*	*05/12/18 23:07*	*1*
2-Fluorobiphenyl	*121*	*X*	*34 - 110*	*05/09/18 14:20*	*05/12/18 23:07*	*1*
2-Fluorophenol (Surr)	*84*		*27 - 110*	*05/09/18 14:20*	*05/12/18 23:07*	*1*
Nitrobenzene-d5 (Surr)	*123*	*X*	*36 - 120*	*05/09/18 14:20*	*05/12/18 23:07*	*1*
Phenol-d5 (Surr)	*28*		*20 - 100*	*05/09/18 14:20*	*05/12/18 23:07*	*1*
Terphenyl-d14 (Surr)	*122*		*40 - 145*	*05/09/18 14:20*	*05/12/18 23:07*	*1*

Client Sample ID: SUPE-W-28C-050318

Lab Sample ID: 480-135500-10

Date Collected: 05/03/18 11:13

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 04:30	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 04:30	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 04:30	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 04:30	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 04:30	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 04:30	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 04:30	1

Client Sample ID: SUPE-W-28C-050318
Date Collected: 05/03/18 11:13
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 04:30	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 04:30	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 04:30	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 04:30	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 04:30	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 04:30	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 04:30	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/12/18 04:30*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/12/18 04:30*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/12/18 04:30*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/12/18 04:30*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*24 - 146*	*05/08/18 14:14*	*05/09/18 18:19*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*05/08/18 14:14*	*05/09/18 18:19*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*05/08/18 14:14*	*05/09/18 18:19*	*1*
Nitrobenzene-d5 (Surr)	*67*		*26 - 120*	*05/08/18 14:14*	*05/09/18 18:19*	*1*
Phenol-d5 (Surr)	*31*		*11 - 120*	*05/08/18 14:14*	*05/09/18 18:19*	*1*
p-Terphenyl-d14	*114*		*64 - 127*	*05/08/18 14:14*	*05/09/18 18:19*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/12/18 23:35	1
1,2-Dichlorobenzene	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/12/18 23:35	1
1,3-Dichlorobenzene	<0.24		1.9	0.24	ug/L		05/09/18 14:20	05/12/18 23:35	1
1,4-Dichlorobenzene	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/12/18 23:35	1
1-Methylnaphthalene	<0.48		1.9	0.48	ug/L		05/09/18 14:20	05/12/18 23:35	1
bis(chloroisopropyl) ether	<0.29	^c	1.9	0.29	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,3,4,6-Tetrachlorophenol	<1.5		4.8	1.5	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4,5-Trichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4,6-Trichlorophenol	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4-Dichlorophenol	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4-Dinitrophenol	<7.1		19	7.1	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4-Dinitrotoluene	<0.29		0.96	0.29	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,6-Dinitrotoluene	<0.12		0.96	0.12	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Chloronaphthalene	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Chlorophenol	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Methylnaphthalene	<0.13		1.9	0.13	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Methylphenol	<0.30		1.9	0.30	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Nitroaniline	<1.0	^c	4.8	1.0	ug/L		05/09/18 14:20	05/12/18 23:35	1
2-Nitrophenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/12/18 23:35	1
3-Nitroaniline	<2.2		9.6	2.2	ug/L		05/09/18 14:20	05/12/18 23:35	1
4,6-Dinitro-2-methylphenol	<4.7		19	4.7	ug/L		05/09/18 14:20	05/12/18 23:35	1

Client Sample ID: SUPE-W-28C-050318
Date Collected: 05/03/18 11:13
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.88		4.8	0.88	ug/L		05/09/18 14:20	05/12/18 23:35	1
4-Chloro-3-methylphenol	<2.1		9.6	2.1	ug/L		05/09/18 14:20	05/12/18 23:35	1
4-Chloroaniline	<2.0		9.6	2.0	ug/L		05/09/18 14:20	05/12/18 23:35	1
4-Chlorophenyl phenyl ether	<0.78		4.8	0.78	ug/L		05/09/18 14:20	05/12/18 23:35	1
4-Nitroaniline	<3.8		9.6	3.8	ug/L		05/09/18 14:20	05/12/18 23:35	1
4-Nitrophenol	<2.3		19	2.3	ug/L		05/09/18 14:20	05/12/18 23:35	1
Acenaphthene	<0.35		0.96	0.35	ug/L		05/09/18 14:20	05/12/18 23:35	1
Acenaphthylene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/12/18 23:35	1
Anthracene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzo[a]pyrene	<0.054		0.19	0.054	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzo[b]fluoranthene	<0.056		0.19	0.056	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzo[g,h,i]perylene	<0.40		0.96	0.40	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzo[k]fluoranthene	<0.071		0.19	0.071	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzoic acid	<4.4	^c	19	4.4	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzyl alcohol	<2.9		19	2.9	ug/L		05/09/18 14:20	05/12/18 23:35	1
Bis(2-chloroethoxy)methane	<0.29		1.9	0.29	ug/L		05/09/18 14:20	05/12/18 23:35	1
Bis(2-chloroethyl)ether	<0.34		1.9	0.34	ug/L		05/09/18 14:20	05/12/18 23:35	1
Bis(2-ethylhexyl) phthalate	<2.3		9.6	2.3	ug/L		05/09/18 14:20	05/12/18 23:35	1
Butyl benzyl phthalate	<0.26		1.9	0.26	ug/L		05/09/18 14:20	05/12/18 23:35	1
Chrysene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/12/18 23:35	1
Dibenz(a,h)anthracene	<0.062		0.29	0.062	ug/L		05/09/18 14:20	05/12/18 23:35	1
Dibenzofuran	<0.34		1.9	0.34	ug/L		05/09/18 14:20	05/12/18 23:35	1
Diethyl phthalate	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/12/18 23:35	1
Dimethyl phthalate	<0.37		1.9	0.37	ug/L		05/09/18 14:20	05/12/18 23:35	1
Di-n-butyl phthalate	<0.77		4.8	0.77	ug/L		05/09/18 14:20	05/12/18 23:35	1
Di-n-octyl phthalate	<2.4		9.6	2.4	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,3,5,6-Tetrachlorophenol	<2.4		4.8	2.4	ug/L		05/09/18 14:20	05/12/18 23:35	1
Fluoranthene	<0.31		0.96	0.31	ug/L		05/09/18 14:20	05/12/18 23:35	1
Fluorene	<0.37		0.96	0.37	ug/L		05/09/18 14:20	05/12/18 23:35	1
Hexachlorobenzene	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/12/18 23:35	1
Hexachlorobutadiene	<1.1		4.8	1.1	ug/L		05/09/18 14:20	05/12/18 23:35	1
Hexachlorocyclopentadiene	<3.3		19	3.3	ug/L		05/09/18 14:20	05/12/18 23:35	1
Hexachloroethane	<0.93		4.8	0.93	ug/L		05/09/18 14:20	05/12/18 23:35	1
Indeno[1,2,3-cd]pyrene	<0.081		0.19	0.081	ug/L		05/09/18 14:20	05/12/18 23:35	1
Isophorone	<0.28		1.9	0.28	ug/L		05/09/18 14:20	05/12/18 23:35	1
Nitrobenzene	<0.43		0.96	0.43	ug/L		05/09/18 14:20	05/12/18 23:35	1
N-Nitrosodi-n-propylamine	<0.13		0.48	0.13	ug/L		05/09/18 14:20	05/12/18 23:35	1
N-Nitrosodiphenylamine	<0.33		1.9	0.33	ug/L		05/09/18 14:20	05/12/18 23:35	1
Phenol	<0.35	^c	4.8	0.35	ug/L		05/09/18 14:20	05/12/18 23:35	1
Pyrene	<0.46		0.96	0.46	ug/L		05/09/18 14:20	05/12/18 23:35	1
2,4-Dimethylphenol	<3.2		9.6	3.2	ug/L		05/09/18 14:20	05/12/18 23:35	1
Benzo[a]anthracene	<0.042		0.19	0.042	ug/L		05/09/18 14:20	05/12/18 23:35	1
Phenanthrene	<0.34		0.96	0.34	ug/L		05/09/18 14:20	05/12/18 23:35	1
3,3'-Dichlorobenzidine	<0.90		4.8	0.90	ug/L		05/09/18 14:20	05/12/18 23:35	1
3 & 4 Methylphenol	<0.42		1.9	0.42	ug/L		05/09/18 14:20	05/12/18 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*40 - 145*	*05/09/18 14:20*	*05/12/18 23:35*	*1*
2-Fluorobiphenyl	*110*		*34 - 110*	*05/09/18 14:20*	*05/12/18 23:35*	*1*
2-Fluorophenol (Surr)	*70*		*27 - 110*	*05/09/18 14:20*	*05/12/18 23:35*	*1*

Client Sample ID: SUPE-W-28C-050318

Lab Sample ID: 480-135500-10
Date Collected: 05/03/18 11:13
Matrix: Water
Date Received: 05/05/18 09:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*118*		*36 - 120*	*05/09/18 14:20*	*05/12/18 23:35*	*1*
Phenol-d5 (Surr)	*32*		*20 - 100*	*05/09/18 14:20*	*05/12/18 23:35*	*1*
Terphenyl-d14 (Surr)	*115*		*40 - 145*	*05/09/18 14:20*	*05/12/18 23:35*	*1*

Client Sample ID: SUPE-W-10AR2-050318

Lab Sample ID: 480-135500-11
Date Collected: 05/03/18 15:54
Matrix: Water
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 04:57	1
1,2,4-Trimethylbenzene	**5.2**		1.0	0.75	ug/L			05/12/18 04:57	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 04:57	1
Benzene	**13**		1.0	0.41	ug/L			05/12/18 04:57	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 04:57	1
Ethylbenzene	**21**		1.0	0.74	ug/L			05/12/18 04:57	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 04:57	1
m-Xylene & p-Xylene	**2.5**		2.0	0.66	ug/L			05/12/18 04:57	1
Naphthalene	**1.5**		1.0	0.43	ug/L			05/12/18 04:57	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 04:57	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 04:57	1
o-Xylene	**13**		1.0	0.76	ug/L			05/12/18 04:57	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 04:57	1
Toluene	**1.3**		1.0	0.51	ug/L			05/12/18 04:57	1
Xylenes, Total	**16**		2.0	0.66	ug/L			05/12/18 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/12/18 04:57*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/12/18 04:57*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/12/18 04:57*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/12/18 04:57*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*24 - 146*	*05/08/18 14:14*	*05/09/18 18:49*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*05/08/18 14:14*	*05/09/18 18:49*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 120*	*05/08/18 14:14*	*05/09/18 18:49*	*1*
Nitrobenzene-d5 (Surr)	*72*		*26 - 120*	*05/08/18 14:14*	*05/09/18 18:49*	*1*
Phenol-d5 (Surr)	*33*		*11 - 120*	*05/08/18 14:14*	*05/09/18 18:49*	*1*
p-Terphenyl-d14	*114*		*64 - 127*	*05/08/18 14:14*	*05/09/18 18:49*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:02	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/13/18 00:02	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/09/18 14:20	05/13/18 00:02	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/13/18 00:02	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-10AR2-050318
Date Collected: 05/03/18 15:54
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-11
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/09/18 14:20	05/13/18 00:02	1
bis(chloroisopropyl) ether	<0.30	^c	2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4,5-Trichlorophenol	<2.3		9.9	2.3	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4-Dichlorophenol	<2.3		9.9	2.3	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4-Dinitrophenol	<7.4		20	7.4	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4-Dinitrotoluene	<0.30		0.99	0.30	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,6-Dinitrotoluene	<0.12		0.99	0.12	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Chlorophenol	<0.79		5.0	0.79	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Nitroaniline	<1.1	^c	5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:02	1
2-Nitrophenol	<2.1		9.9	2.1	ug/L		05/09/18 14:20	05/13/18 00:02	1
3-Nitroaniline	<2.3		9.9	2.3	ug/L		05/09/18 14:20	05/13/18 00:02	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Bromophenyl phenyl ether	<0.90		5.0	0.90	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Chloro-3-methylphenol	<2.2		9.9	2.2	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Chloroaniline	<2.1		9.9	2.1	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Chlorophenyl phenyl ether	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Nitroaniline	<3.9		9.9	3.9	ug/L		05/09/18 14:20	05/13/18 00:02	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/09/18 14:20	05/13/18 00:02	1
Acenaphthene	**16**		0.99	0.36	ug/L		05/09/18 14:20	05/13/18 00:02	1
Acenaphthylene	**0.68**	**J**	0.99	0.32	ug/L		05/09/18 14:20	05/13/18 00:02	1
Anthracene	<0.32		0.99	0.32	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzo[g,h,i]perylene	<0.42		0.99	0.42	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzo[k]fluoranthene	<0.073		0.20	0.073	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzoic acid	<4.5	^c	20	4.5	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzyl alcohol	<3.0		20	3.0	ug/L		05/09/18 14:20	05/13/18 00:02	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:02	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/13/18 00:02	1
Bis(2-ethylhexyl) phthalate	<2.4		9.9	2.4	ug/L		05/09/18 14:20	05/13/18 00:02	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/13/18 00:02	1
Chrysene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:02	1
Dibenz(a,h)anthracene	<0.063		0.30	0.063	ug/L		05/09/18 14:20	05/13/18 00:02	1
Dibenzofuran	**1.5**	**J**	2.0	0.35	ug/L		05/09/18 14:20	05/13/18 00:02	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/13/18 00:02	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/09/18 14:20	05/13/18 00:02	1
Di-n-butyl phthalate	<0.79		5.0	0.79	ug/L		05/09/18 14:20	05/13/18 00:02	1
Di-n-octyl phthalate	<2.4		9.9	2.4	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/09/18 14:20	05/13/18 00:02	1
Fluoranthene	**0.62**	**J**	0.99	0.32	ug/L		05/09/18 14:20	05/13/18 00:02	1
Fluorene	**2.0**		0.99	0.38	ug/L		05/09/18 14:20	05/13/18 00:02	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:02	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:02	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/09/18 14:20	05/13/18 00:02	1

Client Sample ID: SUPE-W-10AR2-050318

Lab Sample ID: 480-135500-11
Date Collected: 05/03/18 15:54
Matrix: Water
Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.96		5.0	0.96	ug/L		05/09/18 14:20	05/13/18 00:02	1
Indeno[1,2,3-cd]pyrene	<0.083		0.20	0.083	ug/L		05/09/18 14:20	05/13/18 00:02	1
Isophorone	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/13/18 00:02	1
Nitrobenzene	<0.45		0.99	0.45	ug/L		05/09/18 14:20	05/13/18 00:02	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:02	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/13/18 00:02	1
Phenol	<0.36	^c	5.0	0.36	ug/L		05/09/18 14:20	05/13/18 00:02	1
Pyrene	**0.59**	**J**	0.99	0.48	ug/L		05/09/18 14:20	05/13/18 00:02	1
2,4-Dimethylphenol	<3.3		9.9	3.3	ug/L		05/09/18 14:20	05/13/18 00:02	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/09/18 14:20	05/13/18 00:02	1
Phenanthrene	<0.35		0.99	0.35	ug/L		05/09/18 14:20	05/13/18 00:02	1
3,3'-Dichlorobenzidine	<0.93		5.0	0.93	ug/L		05/09/18 14:20	05/13/18 00:02	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/13/18 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*40 - 145*	*05/09/18 14:20*	*05/13/18 00:02*	*1*
2-Fluorobiphenyl	*100*		*34 - 110*	*05/09/18 14:20*	*05/13/18 00:02*	*1*
2-Fluorophenol (Surr)	*68*		*27 - 110*	*05/09/18 14:20*	*05/13/18 00:02*	*1*
Nitrobenzene-d5 (Surr)	*112*		*36 - 120*	*05/09/18 14:20*	*05/13/18 00:02*	*1*
Phenol-d5 (Surr)	*40*		*20 - 100*	*05/09/18 14:20*	*05/13/18 00:02*	*1*
Terphenyl-d14 (Surr)	*100*		*40 - 145*	*05/09/18 14:20*	*05/13/18 00:02*	*1*

Client Sample ID: SUPE-W-04AR2-050318

Lab Sample ID: 480-135500-12
Date Collected: 05/03/18 13:28
Matrix: Water
Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 05:24	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 05:24	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 05:24	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 05:24	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 05:24	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 05:24	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 05:24	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 05:24	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 05:24	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 05:24	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 05:24	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 05:24	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 05:24	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 05:24	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*05/12/18 05:24*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/12/18 05:24*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/12/18 05:24*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/12/18 05:24*	*1*

Client Sample ID: SUPE-W-04AR2-050318
Date Collected: 05/03/18 13:28
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*24 - 146*	*05/08/18 14:14*	*05/09/18 19:18*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*05/08/18 14:14*	*05/09/18 19:18*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*05/08/18 14:14*	*05/09/18 19:18*	*1*
Nitrobenzene-d5 (Surr)	*71*		*26 - 120*	*05/08/18 14:14*	*05/09/18 19:18*	*1*
Phenol-d5 (Surr)	*33*		*11 - 120*	*05/08/18 14:14*	*05/09/18 19:18*	*1*
p-Terphenyl-d14	*116*		*64 - 127*	*05/08/18 14:14*	*05/09/18 19:18*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:30	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/13/18 00:30	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/09/18 14:20	05/13/18 00:30	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/13/18 00:30	1
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/09/18 14:20	05/13/18 00:30	1
bis(chloroisopropyl) ether	<0.30	^c	2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4,5-Trichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4-Dinitrophenol	<7.4		20	7.4	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4-Dinitrotoluene	<0.30		1.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Chlorophenol	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Nitroaniline	<1.1	^c	5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
2-Nitrophenol	<2.1		10	2.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
3-Nitroaniline	<2.3		10	2.3	ug/L		05/09/18 14:20	05/13/18 00:30	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Bromophenyl phenyl ether	<0.91		5.0	0.91	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Chloro-3-methylphenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Chloroaniline	<2.1		10	2.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Chlorophenyl phenyl ether	<0.81		5.0	0.81	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Nitroaniline	<3.9		10	3.9	ug/L		05/09/18 14:20	05/13/18 00:30	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/09/18 14:20	05/13/18 00:30	1
Acenaphthene	<0.36		1.0	0.36	ug/L		05/09/18 14:20	05/13/18 00:30	1
Acenaphthylene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/13/18 00:30	1
Anthracene	**0.92**	**J**	1.0	0.32	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzo[g,h,i]perylene	<0.42		1.0	0.42	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzo[k]fluoranthene	<0.074		0.20	0.074	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzoic acid	<4.6	^c	20	4.6	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzyl alcohol	<3.1		20	3.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/13/18 00:30	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/13/18 00:30	1

Client Sample ID: SUPE-W-04AR2-050318

Lab Sample ID: 480-135500-12

Date Collected: 05/03/18 13:28

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<2.4		10	2.4	ug/L		05/09/18 14:20	05/13/18 00:30	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/13/18 00:30	1
Chrysene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:30	1
Dibenz(a,h)anthracene	<0.064		0.30	0.064	ug/L		05/09/18 14:20	05/13/18 00:30	1
Dibenzofuran	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/13/18 00:30	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/13/18 00:30	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/09/18 14:20	05/13/18 00:30	1
Di-n-butyl phthalate	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/13/18 00:30	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/09/18 14:20	05/13/18 00:30	1
Fluoranthene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/13/18 00:30	1
Fluorene	<0.38		1.0	0.38	ug/L		05/09/18 14:20	05/13/18 00:30	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:30	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/13/18 00:30	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/09/18 14:20	05/13/18 00:30	1
Hexachloroethane	<0.97		5.0	0.97	ug/L		05/09/18 14:20	05/13/18 00:30	1
Indeno[1,2,3-cd]pyrene	<0.084		0.20	0.084	ug/L		05/09/18 14:20	05/13/18 00:30	1
Isophorone	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/13/18 00:30	1
Nitrobenzene	<0.45		1.0	0.45	ug/L		05/09/18 14:20	05/13/18 00:30	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/13/18 00:30	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/13/18 00:30	1
Phenol	<0.36	^c	5.0	0.36	ug/L		05/09/18 14:20	05/13/18 00:30	1
Pyrene	<0.48		1.0	0.48	ug/L		05/09/18 14:20	05/13/18 00:30	1
2,4-Dimethylphenol	<3.3		10	3.3	ug/L		05/09/18 14:20	05/13/18 00:30	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/09/18 14:20	05/13/18 00:30	1
Phenanthrene	<0.35		1.0	0.35	ug/L		05/09/18 14:20	05/13/18 00:30	1
3,3'-Dichlorobenzidine	<0.94		5.0	0.94	ug/L		05/09/18 14:20	05/13/18 00:30	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/13/18 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*40 - 145*	*05/09/18 14:20*	*05/13/18 00:30*	*1*
2-Fluorobiphenyl	*113*	*X*	*34 - 110*	*05/09/18 14:20*	*05/13/18 00:30*	*1*
2-Fluorophenol (Surr)	*72*		*27 - 110*	*05/09/18 14:20*	*05/13/18 00:30*	*1*
Nitrobenzene-d5 (Surr)	*124*	*X*	*36 - 120*	*05/09/18 14:20*	*05/13/18 00:30*	*1*
Phenol-d5 (Surr)	*45*		*20 - 100*	*05/09/18 14:20*	*05/13/18 00:30*	*1*
Terphenyl-d14 (Surr)	*111*		*40 - 145*	*05/09/18 14:20*	*05/13/18 00:30*	*1*

Client Sample ID: SUPE-TB-02-050318

Lab Sample ID: 480-135500-13

Date Collected: 05/03/18 00:00

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 01:21	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 01:21	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 01:21	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 01:21	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 01:21	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 01:21	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 01:21	1

Client Sample ID: SUPE-TB-02-050318

Lab Sample ID: 480-135500-13

Date Collected: 05/03/18 00:00

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 01:21	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 01:21	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 01:21	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 01:21	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 01:21	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 01:21	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 01:21	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/12/18 01:21*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*05/12/18 01:21*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/12/18 01:21*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/12/18 01:21*	*1*

Client Sample ID: SUPE-W-18D-050318

Lab Sample ID: 480-135500-14

Date Collected: 05/03/18 09:29

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.057		0.50	0.057	ug/L		05/08/18 14:14	05/09/18 19:47	1
1,3-Dichlorobenzene	<0.082		0.50	0.082	ug/L		05/08/18 14:14	05/09/18 19:47	1
1,4-Dichlorobenzene	<0.068		0.50	0.068	ug/L		05/08/18 14:14	05/09/18 19:47	1
1-Methylnaphthalene	<0.12		0.50	0.12	ug/L		05/08/18 14:14	05/09/18 19:47	1
1,2,4-Trichlorobenzene	<0.092		0.50	0.092	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Chloronaphthalene	<0.066		0.50	0.066	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Chlorophenol	<0.066		5.0	0.066	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4-Dichlorophenol	**0.17**	**J**	0.50	0.056	ug/L		05/08/18 14:14	05/09/18 19:47	1
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4-Dimethylphenol	<0.30		1.0	0.30	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4-Dinitrophenol	<0.60		5.0	0.60	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4-Dinitrotoluene	<0.034		5.0	0.034	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,6-Dinitrotoluene	<0.091		5.0	0.091	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Methylnaphthalene	<0.052		0.50	0.052	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Methylphenol	<0.14		1.0	0.14	ug/L		05/08/18 14:14	05/09/18 19:47	1
Methylphenol, 3 & 4	<0.094		1.0	0.094	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Nitroaniline	<0.095		5.0	0.095	ug/L		05/08/18 14:14	05/09/18 19:47	1
3-Nitroaniline	<0.13	^c	5.0	0.13	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Nitroaniline	<0.025	^c	5.0	0.025	ug/L		05/08/18 14:14	05/09/18 19:47	1
2-Nitrophenol	<0.062		5.0	0.062	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Nitrophenol	<0.39		5.0	0.39	ug/L		05/08/18 14:14	05/09/18 19:47	1
bis(chloroisopropyl) ether	<0.086		5.0	0.086	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,3,4,6-Tetrachlorophenol	<0.39		5.0	0.39	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4,5-Trichlorophenol	**0.17**	**J**	5.0	0.065	ug/L		05/08/18 14:14	05/09/18 19:47	1
2,4,6-Trichlorophenol	<0.072		5.0	0.072	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Chloro-3-methylphenol	<0.053		5.0	0.053	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Chlorophenyl phenyl ether	<0.046		5.0	0.046	ug/L		05/08/18 14:14	05/09/18 19:47	1
4,6-Dinitro-2-methylphenol	<0.74		5.0	0.74	ug/L		05/08/18 14:14	05/09/18 19:47	1
Acenaphthene	<0.036		0.50	0.036	ug/L		05/08/18 14:14	05/09/18 19:47	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-18D-050318
Date Collected: 05/03/18 09:29
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-14
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	<0.056		0.30	0.056	ug/L		05/08/18 14:14	05/09/18 19:47	1
Anthracene	<0.034		0.50	0.034	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzo[a]anthracene	<0.034		0.30	0.034	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzo[b]fluoranthene	<0.063		0.30	0.063	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzo[k]fluoranthene	<0.070		0.30	0.070	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzoic acid	<5.0	*	5.0	5.0	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzo[g,h,i]perylene	<0.058		0.50	0.058	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzo[a]pyrene	<0.13		0.18	0.13	ug/L		05/08/18 14:14	05/09/18 19:47	1
Bis(2-chloroethoxy)methane	<0.064		5.0	0.064	ug/L		05/08/18 14:14	05/09/18 19:47	1
Bis(2-chloroethyl)ether	<0.072		5.0	0.072	ug/L		05/08/18 14:14	05/09/18 19:47	1
Bis(2-ethylhexyl) phthalate	**0.67**	**J**	5.0	0.42	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Bromophenyl phenyl ether	<0.091		5.0	0.091	ug/L		05/08/18 14:14	05/09/18 19:47	1
Butyl benzyl phthalate	<0.16		3.0	0.16	ug/L		05/08/18 14:14	05/09/18 19:47	1
4-Chloroaniline	<0.13		5.0	0.13	ug/L		05/08/18 14:14	05/09/18 19:47	1
Chrysene	<0.074		0.50	0.074	ug/L		05/08/18 14:14	05/09/18 19:47	1
Dibenz(a,h)anthracene	<0.070		0.50	0.070	ug/L		05/08/18 14:14	05/09/18 19:47	1
Dibenzofuran	<0.060		5.0	0.060	ug/L		05/08/18 14:14	05/09/18 19:47	1
Di-n-butyl phthalate	<0.35		2.0	0.35	ug/L		05/08/18 14:14	05/09/18 19:47	1
Di-n-octyl phthalate	<0.20		5.0	0.20	ug/L		05/08/18 14:14	05/09/18 19:47	1
Diethyl phthalate	<0.064		0.50	0.064	ug/L		05/08/18 14:14	05/09/18 19:47	1
Dimethyl phthalate	<0.057		0.50	0.057	ug/L		05/08/18 14:14	05/09/18 19:47	1
Fluoranthene	<0.080		0.50	0.080	ug/L		05/08/18 14:14	05/09/18 19:47	1
Fluorene	<0.058		0.50	0.058	ug/L		05/08/18 14:14	05/09/18 19:47	1
Hexachlorobenzene	<0.22		0.50	0.22	ug/L		05/08/18 14:14	05/09/18 19:47	1
Hexachlorobutadiene	<0.10	^c	1.0	0.10	ug/L		05/08/18 14:14	05/09/18 19:47	1
Hexachlorocyclopentadiene	<0.091		1.0	0.091	ug/L		05/08/18 14:14	05/09/18 19:47	1
Hexachloroethane	<0.088		5.0	0.088	ug/L		05/08/18 14:14	05/09/18 19:47	1
Indeno[1,2,3-cd]pyrene	<0.11		0.50	0.11	ug/L		05/08/18 14:14	05/09/18 19:47	1
Isophorone	<0.051		0.50	0.051	ug/L		05/08/18 14:14	05/09/18 19:47	1
Naphthalene	<0.064		1.0	0.064	ug/L		05/08/18 14:14	05/09/18 19:47	1
Nitrobenzene	<0.065		0.50	0.065	ug/L		05/08/18 14:14	05/09/18 19:47	1
N-Nitrosodiphenylamine	<0.070		5.0	0.070	ug/L		05/08/18 14:14	05/09/18 19:47	1
N-Nitrosodi-n-propylamine	<0.060		5.0	0.060	ug/L		05/08/18 14:14	05/09/18 19:47	1
Pentachlorophenol	<0.34	^c	1.0	0.34	ug/L		05/08/18 14:14	05/09/18 19:47	1
Phenanthrene	<0.062		0.20	0.062	ug/L		05/08/18 14:14	05/09/18 19:47	1
Phenol	<0.10		1.0	0.10	ug/L		05/08/18 14:14	05/09/18 19:47	1
Pyrene	<0.076		0.50	0.076	ug/L		05/08/18 14:14	05/09/18 19:47	1
Benzyl alcohol	<0.19	^c	5.0	0.19	ug/L		05/08/18 14:14	05/09/18 19:47	1
3,3'-Dichlorobenzidine	<0.22		5.0	0.22	ug/L		05/08/18 14:14	05/09/18 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*24 - 146*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
Nitrobenzene-d5 (Surr)	*64*		*26 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
Phenol-d5 (Surr)	*29*		*11 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
p-Terphenyl-d14	*109*		*64 - 127*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*05/08/18 14:14*	*05/09/18 19:47*	*1*
2,4,6-Tribromophenol (Surr)	*96*		*24 - 146*	*05/08/18 14:14*	*05/09/18 19:47*	*1*

Client Sample ID: SUPE-W-18D-050318
Date Collected: 05/03/18 09:29
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-14
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	64		26 - 120	05/08/18 14:14	05/09/18 19:47	1
Phenol-d5 (Surr)	29		11 - 120	05/08/18 14:14	05/09/18 19:47	1

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.29	H	1.9	0.29	ug/L		05/11/18 15:25	05/12/18 01:40	1
1,2-Dichlorobenzene	<0.28	H	1.9	0.28	ug/L		05/11/18 15:25	05/12/18 01:40	1
1,3-Dichlorobenzene	<0.24	H	1.9	0.24	ug/L		05/11/18 15:25	05/12/18 01:40	1
1,4-Dichlorobenzene	<0.26	H	1.9	0.26	ug/L		05/11/18 15:25	05/12/18 01:40	1
1-Methylnaphthalene	<0.48	H	1.9	0.48	ug/L		05/11/18 15:25	05/12/18 01:40	1
bis(chloroisopropyl) ether	<0.29	H ^c	1.9	0.29	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,3,4,6-Tetrachlorophenol	<1.4	H	4.8	1.4	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4,5-Trichlorophenol	<2.2	H	9.6	2.2	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4,6-Trichlorophenol	<1.1	H	4.8	1.1	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4-Dichlorophenol	<2.2	H	9.6	2.2	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4-Dinitrophenol	<7.1	H ^c	19	7.1	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4-Dinitrotoluene	<0.29	H	0.96	0.29	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,6-Dinitrotoluene	<0.12	H	0.96	0.12	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Chloronaphthalene	<0.33	H	1.9	0.33	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Chlorophenol	<0.77	H	4.8	0.77	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Methylnaphthalene	<0.12	H	1.9	0.12	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Methylphenol	<0.30	H	1.9	0.30	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Nitroaniline	<1.0	H	4.8	1.0	ug/L		05/11/18 15:25	05/12/18 01:40	1
2-Nitrophenol	<2.1	H	9.6	2.1	ug/L		05/11/18 15:25	05/12/18 01:40	1
3-Nitroaniline	<2.2	H	9.6	2.2	ug/L		05/11/18 15:25	05/12/18 01:40	1
4,6-Dinitro-2-methylphenol	<4.7	H	19	4.7	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Bromophenyl phenyl ether	<0.87	H	4.8	0.87	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Chloro-3-methylphenol	<2.1	H	9.6	2.1	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Chloroaniline	<2.0	H	9.6	2.0	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Chlorophenyl phenyl ether	<0.78	H	4.8	0.78	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Nitroaniline	<3.8	H	9.6	3.8	ug/L		05/11/18 15:25	05/12/18 01:40	1
4-Nitrophenol	<2.2	H ^c	19	2.2	ug/L		05/11/18 15:25	05/12/18 01:40	1
Acenaphthene	<0.35	H	0.96	0.35	ug/L		05/11/18 15:25	05/12/18 01:40	1
Acenaphthylene	<0.31	H	0.96	0.31	ug/L		05/11/18 15:25	05/12/18 01:40	1
Anthracene	<0.31	H	0.96	0.31	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzo[a]pyrene	<0.054	H	0.19	0.054	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzo[b]fluoranthene	<0.056	H	0.19	0.056	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzo[g,h,i]perylene	<0.40	H	0.96	0.40	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzo[k]fluoranthene	<0.071	H	0.19	0.071	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzoic acid	<4.4	H	19	4.4	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzyl alcohol	<2.9	H	19	2.9	ug/L		05/11/18 15:25	05/12/18 01:40	1
Bis(2-chloroethoxy)methane	<0.29	H	1.9	0.29	ug/L		05/11/18 15:25	05/12/18 01:40	1
Bis(2-chloroethyl)ether	<0.34	H	1.9	0.34	ug/L		05/11/18 15:25	05/12/18 01:40	1
Bis(2-ethylhexyl) phthalate	<2.3	H	9.6	2.3	ug/L		05/11/18 15:25	05/12/18 01:40	1
Butyl benzyl phthalate	<0.26	H	1.9	0.26	ug/L		05/11/18 15:25	05/12/18 01:40	1
Chrysene	<0.13	H *	0.48	0.13	ug/L		05/11/18 15:25	05/12/18 01:40	1
Dibenz(a,h)anthracene	<0.061	H	0.29	0.061	ug/L		05/11/18 15:25	05/12/18 01:40	1
Dibenzofuran	<0.34	H	1.9	0.34	ug/L		05/11/18 15:25	05/12/18 01:40	1
Diethyl phthalate	<0.42	H	1.9	0.42	ug/L		05/11/18 15:25	05/12/18 01:40	1

Client Sample ID: SUPE-W-18D-050318

Lab Sample ID: 480-135500-14

Date Collected: 05/03/18 09:29

Matrix: Water

Date Received: 05/05/18 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	<0.36	H	1.9	0.36	ug/L		05/11/18 15:25	05/12/18 01:40	1
Di-n-butyl phthalate	**1.6**	**J H**	4.8	0.77	ug/L		05/11/18 15:25	05/12/18 01:40	1
Di-n-octyl phthalate	<2.4	H	9.6	2.4	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,3,5,6-Tetrachlorophenol	<2.4	H	4.8	2.4	ug/L		05/11/18 15:25	05/12/18 01:40	1
Fluoranthene	<0.31	H	0.96	0.31	ug/L		05/11/18 15:25	05/12/18 01:40	1
Fluorene	<0.36	H	0.96	0.36	ug/L		05/11/18 15:25	05/12/18 01:40	1
Hexachlorobenzene	<0.13	H	0.48	0.13	ug/L		05/11/18 15:25	05/12/18 01:40	1
Hexachlorobutadiene	<1.1	H	4.8	1.1	ug/L		05/11/18 15:25	05/12/18 01:40	1
Hexachlorocyclopentadiene	<3.3	H ^c	19	3.3	ug/L		05/11/18 15:25	05/12/18 01:40	1
Hexachloroethane	<0.93	H	4.8	0.93	ug/L		05/11/18 15:25	05/12/18 01:40	1
Indeno[1,2,3-cd]pyrene	<0.081	H	0.19	0.081	ug/L		05/11/18 15:25	05/12/18 01:40	1
Isophorone	<0.28	H *	1.9	0.28	ug/L		05/11/18 15:25	05/12/18 01:40	1
Naphthalene	<0.29	H	0.96	0.29	ug/L		05/11/18 15:25	05/12/18 01:40	1
Nitrobenzene	<0.43	H	0.96	0.43	ug/L		05/11/18 15:25	05/12/18 01:40	1
N-Nitrosodi-n-propylamine	<0.13	H	0.48	0.13	ug/L		05/11/18 15:25	05/12/18 01:40	1
N-Nitrosodiphenylamine	<0.33	H	1.9	0.33	ug/L		05/11/18 15:25	05/12/18 01:40	1
Phenol	<0.35	H	4.8	0.35	ug/L		05/11/18 15:25	05/12/18 01:40	1
Pyrene	<0.46	H	0.96	0.46	ug/L		05/11/18 15:25	05/12/18 01:40	1
2,4-Dimethylphenol	<3.2	H	9.6	3.2	ug/L		05/11/18 15:25	05/12/18 01:40	1
Benzo[a]anthracene	<0.042	H	0.19	0.042	ug/L		05/11/18 15:25	05/12/18 01:40	1
Phenanthrene	<0.34	H	0.96	0.34	ug/L		05/11/18 15:25	05/12/18 01:40	1
3,3'-Dichlorobenzidine	<0.90	H	4.8	0.90	ug/L		05/11/18 15:25	05/12/18 01:40	1
3 & 4 Methylphenol	<0.42	H	1.9	0.42	ug/L		05/11/18 15:25	05/12/18 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*40 - 145*	*05/11/18 15:25*	*05/12/18 01:40*	*1*
2-Fluorobiphenyl	*80*	*^c*	*34 - 110*	*05/11/18 15:25*	*05/12/18 01:40*	*1*
2-Fluorophenol (Surr)	*48*		*27 - 110*	*05/11/18 15:25*	*05/12/18 01:40*	*1*
Nitrobenzene-d5 (Surr)	*71*		*36 - 120*	*05/11/18 15:25*	*05/12/18 01:40*	*1*
Phenol-d5 (Surr)	*26*		*20 - 100*	*05/11/18 15:25*	*05/12/18 01:40*	*1*
Terphenyl-d14 (Surr)	*108*		*40 - 145*	*05/11/18 15:25*	*05/12/18 01:40*	*1*

Client Sample ID: SUPE-W-TB-01-050218

Lab Sample ID: 480-135500-15

Date Collected: 05/02/18 00:00

Matrix: Water

Date Received: 05/05/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/11/18 08:26	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/11/18 08:26	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/11/18 08:26	1
Benzene	<0.41		1.0	0.41	ug/L			05/11/18 08:26	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/11/18 08:26	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/11/18 08:26	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/11/18 08:26	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/11/18 08:26	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/11/18 08:26	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/11/18 08:26	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/11/18 08:26	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/11/18 08:26	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-TB-01-050218
Date Collected: 05/02/18 00:00
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-15
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.73		1.0	0.73	ug/L			05/11/18 08:26	1
Toluene	<0.51		1.0	0.51	ug/L			05/11/18 08:26	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/11/18 08:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*05/11/18 08:26*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*05/11/18 08:26*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*05/11/18 08:26*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*05/11/18 08:26*	*1*

Surrogate Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-135500-1	SUPE-W-06A-050218	88	94	96	83
480-135500-2	SUPE-EB-01-050218	94	95	98	85
480-135500-3	SUPE-W-06C-050318	100	103	102	101
480-135500-3 MS	SUPE-W-06C-050318	99	102	103	100
480-135500-3 MSD	SUPE-W-06C-050318	96	103	98	98
480-135500-4	SUPE-W-12A-050318	98	101	101	100
480-135500-5	SUPE-W-12CR-050318	98	102	100	97
480-135500-6	SUPE-EB-02-050318	98	102	99	98
480-135500-7	SUPE-W-30A-050318	103	99	105	97
480-135500-8	SUPE-W-30C-050318	91	95	100	86
480-135500-9	SUPE-W-99-050318	102	105	102	99
480-135500-10	SUPE-W-28C-050318	98	104	100	99
480-135500-11	SUPE-W-10AR2-050318	98	101	101	98
480-135500-12	SUPE-W-04AR2-050318	97	98	99	96
480-135500-13	SUPE-TB-02-050318	100	107	103	99
480-135500-15	SUPE-W-TB-01-050218	93	88	94	93
LCS 480-413737/5	Lab Control Sample	94	108	105	97
LCS 480-413745/5	Lab Control Sample	86	95	87	97
LCS 480-413988/5	Lab Control Sample	92	105	97	103
MB 480-413737/8	Method Blank	95	97	104	88
MB 480-413745/7	Method Blank	91	93	89	94
MB 480-413988/7	Method Blank	96	100	99	99

Surrogate Legend

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

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(40-145)	(34-110)	(27-110)	(36-120)	(20-100)	(40-145)
480-135500-1	SUPE-W-06A-050218	109	82 ^c	66	83	36	100
480-135500-2	SUPE-EB-01-050218	101	73 ^c	68	76	38	99
480-135500-3	SUPE-W-06C-050318	110	80 ^c	66	75	36	98
480-135500-3 MS	SUPE-W-06C-050318	118	81	71	87	44	87
480-135500-3 MSD	SUPE-W-06C-050318	108	70	63	75	38	74
480-135500-4	SUPE-W-12A-050318	98	76 ^c	49	74	27	82
480-135500-5	SUPE-W-12CR-050318	83	57 ^c	43	55	21	67
480-135500-6	SUPE-EB-02-050318	96	103	71	109	38	110
480-135500-7	SUPE-W-30A-050318	103	98	75	109	45	82
480-135500-8	SUPE-W-30C-050318	101	102	63	111	33	106
480-135500-9	SUPE-W-99-050318	119	121 X	84	123 X	28	122
480-135500-10	SUPE-W-28C-050318	107	110	70	118	32	115
480-135500-11	SUPE-W-10AR2-050318	101	100	68	112	40	100
480-135500-12	SUPE-W-04AR2-050318	110	113 X	72	124 X	45	111

Surrogate Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(40-145)	(34-110)	(27-110)	(36-120)	(20-100)	(40-145)
480-135500-14	SUPE-W-18D-050318	100	80 ^c	48	71	26	108
LCS 500-431418/2-A	Lab Control Sample	114	76	76	87	50	92
LCS 500-431815/2-A	Lab Control Sample	135	95	92	104	62	114
MB 500-431418/1-A	Method Blank	100	77	74	80	46	103
MB 500-431815/1-A	Method Blank	110	94	77	89	46	131

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	TBP	FBP	FBP	2FP	2FP	NBZ	NBZ
Lab Sample ID	Client Sample ID	(24-146)	(24-146)	(37-120)	(37-120)	(10-120)	(10-120)	(26-120)	(26-120)
480-135500-1	SUPE-W-06A-050218	90	90	87	87	47	47	69	69
480-135500-2	SUPE-EB-01-050218	83	83	80	80	44	44	62	62
480-135500-3	SUPE-W-06C-050318	92	92	93	93	51	51	74	74
480-135500-3 MS	SUPE-W-06C-050318	96	96	98	98	56	56	92	92
480-135500-3 MSD	SUPE-W-06C-050318	92	92	88	88	50	50	75	75
480-135500-4	SUPE-W-12A-050318	81	81	80	80	42	42	63	63
480-135500-5	SUPE-W-12CR-050318	94	94	83	83	46	46	65	65
480-135500-6	SUPE-EB-02-050318	81	81	91	91	51	51	75	75
480-135500-7	SUPE-W-30A-050318	83	83	74	74	42	42	59	59
480-135500-8	SUPE-W-30C-050318	91	91	91	91	45	45	67	67
480-135500-9	SUPE-W-99-050318	88	88	92	92	48	48	72	72
480-135500-10	SUPE-W-28C-050318	90	90	89	89	48	48	67	67
480-135500-11	SUPE-W-10AR2-050318	100	100	93	93	52	52	72	72
480-135500-12	SUPE-W-04AR2-050318	98	98	91	91	49	49	71	71
480-135500-14	SUPE-W-18D-050318	96	96	83	83	43	43	64	64
LCS 480-413163/2-A	Lab Control Sample	97	97	97	97	55	55	79	79
MB 480-413163/1-A	Method Blank	95	95	100	100	56	56	85	85

		Percent Surrogate Recovery (Acceptance Limits)		
		PHL	PHL	TPHd14
Lab Sample ID	Client Sample ID	(11-120)	(11-120)	(64-127)
480-135500-1	SUPE-W-06A-050218	32	32	115
480-135500-2	SUPE-EB-01-050218	31	31	112
480-135500-3	SUPE-W-06C-050318	35	35	95
480-135500-3 MS	SUPE-W-06C-050318	37	37	95
480-135500-3 MSD	SUPE-W-06C-050318	34	34	90
480-135500-4	SUPE-W-12A-050318	28	28	75
480-135500-5	SUPE-W-12CR-050318	30	30	112
480-135500-6	SUPE-EB-02-050318	35	35	113
480-135500-7	SUPE-W-30A-050318	27	27	77

Surrogate Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	PHL (11-120)	PHL (11-120)	TPHd14 (64-127)						
480-135500-8	SUPE-W-30C-050318	31	31	114						
480-135500-9	SUPE-W-99-050318	31	31	115						
480-135500-10	SUPE-W-28C-050318	31	31	114						
480-135500-11	SUPE-W-10AR2-050318	33	33	114						
480-135500-12	SUPE-W-04AR2-050318	33	33	116						
480-135500-14	SUPE-W-18D-050318	29	29	109						
LCS 480-413163/2-A	Lab Control Sample	37	37	111						
MB 480-413163/1-A	Method Blank	36	36	118						

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-413737/8
Matrix: Water
Analysis Batch: 413737

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/10/18 21:10	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/10/18 21:10	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/10/18 21:10	1
Benzene	<0.41		1.0	0.41	ug/L			05/10/18 21:10	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/10/18 21:10	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/10/18 21:10	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/10/18 21:10	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/10/18 21:10	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/10/18 21:10	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/10/18 21:10	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/10/18 21:10	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/10/18 21:10	1
Styrene	<0.73		1.0	0.73	ug/L			05/10/18 21:10	1
Toluene	<0.51		1.0	0.51	ug/L			05/10/18 21:10	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/10/18 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*05/10/18 21:10*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/10/18 21:10*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/10/18 21:10*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*05/10/18 21:10*	*1*

Lab Sample ID: LCS 480-413737/5
Matrix: Water
Analysis Batch: 413737

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.4		ug/L		106	73 - 126
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		94	76 - 121
1,3,5-Trimethylbenzene	25.0	23.6		ug/L		94	77 - 121
Benzene	25.0	27.3		ug/L		109	71 - 124
Chloromethane	25.0	24.8		ug/L		99	68 - 124
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	25.6		ug/L		102	77 - 120
m-Xylene & p-Xylene	25.0	26.6		ug/L		106	76 - 122
Naphthalene	25.0	23.5		ug/L		94	66 - 125
n-Butylbenzene	25.0	23.1		ug/L		92	71 - 128
N-Propylbenzene	25.0	22.8		ug/L		91	75 - 127
o-Xylene	25.0	25.9		ug/L		104	76 - 122
Styrene	25.0	26.2		ug/L		105	80 - 120
Toluene	25.0	26.2		ug/L		105	80 - 122
Xylenes, Total	50.0	52.5		ug/L		105	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*

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

Lab Sample ID: LCS 480-413737/5
Matrix: Water
Analysis Batch: 413737

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: MB 480-413745/7
Matrix: Water
Analysis Batch: 413745

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/10/18 23:03	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/10/18 23:03	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/10/18 23:03	1
Benzene	<0.41		1.0	0.41	ug/L			05/10/18 23:03	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/10/18 23:03	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/10/18 23:03	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/10/18 23:03	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/10/18 23:03	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/10/18 23:03	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/10/18 23:03	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/10/18 23:03	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/10/18 23:03	1
Styrene	<0.73		1.0	0.73	ug/L			05/10/18 23:03	1
Toluene	<0.51		1.0	0.51	ug/L			05/10/18 23:03	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/10/18 23:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		77 - 120		05/10/18 23:03	1
4-Bromofluorobenzene (Surr)	93		73 - 120		05/10/18 23:03	1
Dibromofluoromethane (Surr)	89		75 - 123		05/10/18 23:03	1
Toluene-d8 (Surr)	94		80 - 120		05/10/18 23:03	1

Lab Sample ID: LCS 480-413745/5
Matrix: Water
Analysis Batch: 413745

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	23.3		ug/L		93	73 - 126
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	76 - 121
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	77 - 121
Benzene	25.0	23.1		ug/L		92	71 - 124
Chloromethane	25.0	20.8		ug/L		83	68 - 124
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
Methyl tert-butyl ether	25.0	24.3		ug/L		97	77 - 120
m-Xylene & p-Xylene	25.0	25.1		ug/L		100	76 - 122
Naphthalene	25.0	26.3		ug/L		105	66 - 125
n-Butylbenzene	25.0	25.5		ug/L		102	71 - 128
N-Propylbenzene	25.0	25.5		ug/L		102	75 - 127
o-Xylene	25.0	25.1		ug/L		100	76 - 122
Styrene	25.0	25.9		ug/L		103	80 - 120
Toluene	25.0	25.4		ug/L		101	80 - 122

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

Lab Sample ID: LCS 480-413745/5
Matrix: Water
Analysis Batch: 413745

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	50.0	50.2		ug/L		100	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*87*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-413988/7
Matrix: Water
Analysis Batch: 413988

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.82		1.0	0.82	ug/L			05/12/18 00:33	1
1,2,4-Trimethylbenzene	<0.75		1.0	0.75	ug/L			05/12/18 00:33	1
1,3,5-Trimethylbenzene	<0.77		1.0	0.77	ug/L			05/12/18 00:33	1
Benzene	<0.41		1.0	0.41	ug/L			05/12/18 00:33	1
Chloromethane	<0.35		1.0	0.35	ug/L			05/12/18 00:33	1
Ethylbenzene	<0.74		1.0	0.74	ug/L			05/12/18 00:33	1
Methyl tert-butyl ether	<0.16		1.0	0.16	ug/L			05/12/18 00:33	1
m-Xylene & p-Xylene	<0.66		2.0	0.66	ug/L			05/12/18 00:33	1
Naphthalene	<0.43		1.0	0.43	ug/L			05/12/18 00:33	1
n-Butylbenzene	<0.64		1.0	0.64	ug/L			05/12/18 00:33	1
N-Propylbenzene	<0.69		1.0	0.69	ug/L			05/12/18 00:33	1
o-Xylene	<0.76		1.0	0.76	ug/L			05/12/18 00:33	1
Styrene	<0.73		1.0	0.73	ug/L			05/12/18 00:33	1
Toluene	<0.51		1.0	0.51	ug/L			05/12/18 00:33	1
Xylenes, Total	<0.66		2.0	0.66	ug/L			05/12/18 00:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/12/18 00:33*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/12/18 00:33*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/12/18 00:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/12/18 00:33*	*1*

Lab Sample ID: LCS 480-413988/5
Matrix: Water
Analysis Batch: 413988

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	73 - 126
1,2,4-Trimethylbenzene	25.0	24.4		ug/L		98	76 - 121
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
Benzene	25.0	23.8		ug/L		95	71 - 124
Chloromethane	25.0	18.9		ug/L		76	68 - 124
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
Methyl tert-butyl ether	25.0	23.0		ug/L		92	77 - 120
m-Xylene & p-Xylene	25.0	24.0		ug/L		96	76 - 122

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

Lab Sample ID: LCS 480-413988/5
Matrix: Water
Analysis Batch: 413988

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	25.0	20.9		ug/L		83	66 - 125
n-Butylbenzene	25.0	23.2		ug/L		93	71 - 128
N-Propylbenzene	25.0	24.5		ug/L		98	75 - 127
o-Xylene	25.0	23.9		ug/L		96	76 - 122
Styrene	25.0	23.8		ug/L		95	80 - 120
Toluene	25.0	24.1		ug/L		97	80 - 122
Xylenes, Total	50.0	47.9		ug/L		96	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 480-135500-3 MS
Matrix: Water
Analysis Batch: 413988

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<0.82		25.0	30.0		ug/L		120	73 - 126
1,2,4-Trimethylbenzene	<0.75		25.0	27.9		ug/L		112	76 - 121
1,3,5-Trimethylbenzene	<0.77		25.0	29.1		ug/L		116	77 - 121
Benzene	<0.41		25.0	29.5		ug/L		118	71 - 124
Chloromethane	<0.35		25.0	26.9		ug/L		108	68 - 124
Ethylbenzene	<0.74		25.0	27.2		ug/L		109	77 - 123
Methyl tert-butyl ether	<0.16		25.0	26.6		ug/L		106	77 - 120
m-Xylene & p-Xylene	<0.66		25.0	28.2		ug/L		113	76 - 122
Naphthalene	<0.43		25.0	23.7		ug/L		95	66 - 125
n-Butylbenzene	<0.64		25.0	26.5		ug/L		106	71 - 128
N-Propylbenzene	<0.69		25.0	28.3		ug/L		113	75 - 127
o-Xylene	<0.76		25.0	26.8		ug/L		107	76 - 122
Styrene	<0.73		25.0	26.9		ug/L		108	80 - 120
Toluene	<0.51		25.0	27.7		ug/L		111	80 - 122
Xylenes, Total	<0.66		50.0	55.0		ug/L		110	76 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 413988

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	<0.82		25.0	29.1		ug/L		117	73 - 126	3	15
1,2,4-Trimethylbenzene	<0.75		25.0	28.0		ug/L		112	76 - 121	0	20

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

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 413988

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	<0.77		25.0	28.6		ug/L		114	77 - 121	2	20
Benzene	<0.41		25.0	28.5		ug/L		114	71 - 124	3	13
Chloromethane	<0.35		25.0	22.7	F2	ug/L		91	68 - 124	17	15
Ethylbenzene	<0.74		25.0	26.9		ug/L		108	77 - 123	1	15
Methyl tert-butyl ether	<0.16		25.0	25.3		ug/L		101	77 - 120	5	37
m-Xylene & p-Xylene	<0.66		25.0	28.0		ug/L		112	76 - 122	1	16
Naphthalene	<0.43		25.0	23.0		ug/L		92	66 - 125	3	20
n-Butylbenzene	<0.64		25.0	26.5		ug/L		106	71 - 128	0	15
N-Propylbenzene	<0.69		25.0	27.8		ug/L		111	75 - 127	2	15
o-Xylene	<0.76		25.0	26.2		ug/L		105	76 - 122	2	16
Styrene	<0.73		25.0	26.3		ug/L		105	80 - 120	2	20
Toluene	<0.51		25.0	28.0		ug/L		112	80 - 122	1	15
Xylenes, Total	<0.66		50.0	54.2		ug/L		108	76 - 122	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 500-431418/1-A
Matrix: Water
Analysis Batch: 431644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431418

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/10/18 18:49	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/10/18 18:49	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/09/18 14:20	05/10/18 18:49	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/10/18 18:49	1
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/09/18 14:20	05/10/18 18:49	1
bis(chloroisopropyl) ether	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4,5-Trichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4-Dinitrophenol	<7.4		20	7.4	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4-Dinitrotoluene	<0.30		1.0	0.30	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Chlorophenol	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Nitroaniline	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
2-Nitrophenol	<2.1		10	2.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
3-Nitroaniline	<2.3		10	2.3	ug/L		05/09/18 14:20	05/10/18 18:49	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/09/18 14:20	05/10/18 18:49	1

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

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

Lab Sample ID: MB 500-431418/1-A
Matrix: Water
Analysis Batch: 431644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431418

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.91		5.0	0.91	ug/L		05/09/18 14:20	05/10/18 18:49	1
4-Chloro-3-methylphenol	<2.2		10	2.2	ug/L		05/09/18 14:20	05/10/18 18:49	1
4-Chloroaniline	<2.1		10	2.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
4-Chlorophenyl phenyl ether	<0.81		5.0	0.81	ug/L		05/09/18 14:20	05/10/18 18:49	1
4-Nitroaniline	<3.9		10	3.9	ug/L		05/09/18 14:20	05/10/18 18:49	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/09/18 14:20	05/10/18 18:49	1
Acenaphthene	<0.36		1.0	0.36	ug/L		05/09/18 14:20	05/10/18 18:49	1
Acenaphthylene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/10/18 18:49	1
Anthracene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzo[g,h,i]perylene	<0.42		1.0	0.42	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzo[k]fluoranthene	<0.074		0.20	0.074	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzoic acid	<4.6		20	4.6	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzyl alcohol	<3.1		20	3.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/09/18 14:20	05/10/18 18:49	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/10/18 18:49	1
Bis(2-ethylhexyl) phthalate	<2.4		10	2.4	ug/L		05/09/18 14:20	05/10/18 18:49	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/09/18 14:20	05/10/18 18:49	1
Chrysene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/10/18 18:49	1
Dibenz(a,h)anthracene	<0.064		0.30	0.064	ug/L		05/09/18 14:20	05/10/18 18:49	1
Dibenzofuran	<0.35		2.0	0.35	ug/L		05/09/18 14:20	05/10/18 18:49	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/10/18 18:49	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/09/18 14:20	05/10/18 18:49	1
Di-n-butyl phthalate	<0.80		5.0	0.80	ug/L		05/09/18 14:20	05/10/18 18:49	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/09/18 14:20	05/10/18 18:49	1
Fluoranthene	<0.32		1.0	0.32	ug/L		05/09/18 14:20	05/10/18 18:49	1
Fluorene	<0.38		1.0	0.38	ug/L		05/09/18 14:20	05/10/18 18:49	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/10/18 18:49	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/09/18 14:20	05/10/18 18:49	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/09/18 14:20	05/10/18 18:49	1
Hexachloroethane	<0.97		5.0	0.97	ug/L		05/09/18 14:20	05/10/18 18:49	1
Indeno[1,2,3-cd]pyrene	<0.084		0.20	0.084	ug/L		05/09/18 14:20	05/10/18 18:49	1
Isophorone	<0.29		2.0	0.29	ug/L		05/09/18 14:20	05/10/18 18:49	1
Naphthalene	<0.30		1.0	0.30	ug/L		05/09/18 14:20	05/10/18 18:49	1
Nitrobenzene	<0.45		1.0	0.45	ug/L		05/09/18 14:20	05/10/18 18:49	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/09/18 14:20	05/10/18 18:49	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/09/18 14:20	05/10/18 18:49	1
Phenol	<0.36		5.0	0.36	ug/L		05/09/18 14:20	05/10/18 18:49	1
Pyrene	<0.48		1.0	0.48	ug/L		05/09/18 14:20	05/10/18 18:49	1
2,4-Dimethylphenol	<3.3		10	3.3	ug/L		05/09/18 14:20	05/10/18 18:49	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/09/18 14:20	05/10/18 18:49	1
Phenanthrene	<0.35		1.0	0.35	ug/L		05/09/18 14:20	05/10/18 18:49	1
3,3'-Dichlorobenzidine	<0.94		5.0	0.94	ug/L		05/09/18 14:20	05/10/18 18:49	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/09/18 14:20	05/10/18 18:49	1

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

Lab Sample ID: MB 500-431418/1-A
Matrix: Water
Analysis Batch: 431644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431418

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	100		40 - 145	05/09/18 14:20	05/10/18 18:49	1
2-Fluorobiphenyl	77		34 - 110	05/09/18 14:20	05/10/18 18:49	1
2-Fluorophenol (Surr)	74		27 - 110	05/09/18 14:20	05/10/18 18:49	1
Nitrobenzene-d5 (Surr)	80		36 - 120	05/09/18 14:20	05/10/18 18:49	1
Phenol-d5 (Surr)	46		20 - 100	05/09/18 14:20	05/10/18 18:49	1
Terphenyl-d14 (Surr)	103		40 - 145	05/09/18 14:20	05/10/18 18:49	1

Lab Sample ID: LCS 500-431418/2-A
Matrix: Water
Analysis Batch: 431644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	40.0	25.0		ug/L		63	26 - 110
1,2-Dichlorobenzene	40.0	24.3		ug/L		61	26 - 110
1,3-Dichlorobenzene	40.0	23.3		ug/L		58	22 - 110
1,4-Dichlorobenzene	40.0	23.5		ug/L		59	23 - 110
1-Methylnaphthalene	40.0	27.0		ug/L		67	38 - 110
bis(chloroisopropyl) ether	40.0	31.1		ug/L		78	38 - 110
2,3,4,6-Tetrachlorophenol	40.0	35.6		ug/L		89	44 - 118
2,4,5-Trichlorophenol	40.0	32.8		ug/L		82	63 - 120
2,4,6-Trichlorophenol	40.0	31.6		ug/L		79	62 - 110
2,4-Dichlorophenol	40.0	30.9		ug/L		77	62 - 110
2,4-Dinitrophenol	80.0	55.9		ug/L		70	37 - 130
2,4-Dinitrotoluene	40.0	34.9		ug/L		87	63 - 122
2,6-Dinitrotoluene	40.0	37.1		ug/L		93	63 - 119
2-Chloronaphthalene	40.0	27.9		ug/L		70	39 - 110
2-Chlorophenol	40.0	28.8		ug/L		72	59 - 110
2-Methylnaphthalene	40.0	31.1		ug/L		78	34 - 110
2-Methylphenol	40.0	29.0		ug/L		73	53 - 110
2-Nitroaniline	40.0	35.0		ug/L		87	59 - 122
2-Nitrophenol	40.0	35.8		ug/L		90	58 - 110
3-Nitroaniline	40.0	27.6		ug/L		69	47 - 123
4,6-Dinitro-2-methylphenol	80.0	67.5		ug/L		84	50 - 117
4-Bromophenyl phenyl ether	40.0	32.0		ug/L		80	58 - 120
4-Chloro-3-methylphenol	40.0	31.5		ug/L		79	64 - 120
4-Chloroaniline	40.0	27.9		ug/L		70	35 - 128
4-Chlorophenyl phenyl ether	40.0	30.2		ug/L		75	47 - 112
4-Nitroaniline	40.0	23.5		ug/L		59	52 - 147
4-Nitrophenol	80.0	28.2		ug/L		35	20 - 110
Acenaphthene	40.0	27.8		ug/L		70	46 - 110
Acenaphthylene	40.0	29.0		ug/L		72	47 - 110
Anthracene	40.0	32.1		ug/L		80	67 - 110
Benzo[a]pyrene	40.0	35.9		ug/L		90	70 - 120
Benzo[b]fluoranthene	40.0	35.8		ug/L		89	69 - 123
Benzo[g,h,i]perylene	40.0	36.8		ug/L		92	70 - 120
Benzo[k]fluoranthene	40.0	34.9		ug/L		87	70 - 120
Benzoic acid	80.0	36.1		ug/L		45	10 - 100
Benzyl alcohol	40.0	32.3		ug/L		81	33 - 127

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

Lab Sample ID: LCS 500-431418/2-A
Matrix: Water
Analysis Batch: 431644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	30.2		ug/L		75	60 - 110
Bis(2-chloroethyl)ether	40.0	29.8		ug/L		75	49 - 110
Bis(2-ethylhexyl) phthalate	40.0	34.4		ug/L		86	69 - 120
Butyl benzyl phthalate	40.0	34.7		ug/L		87	68 - 120
Chrysene	40.0	41.6		ug/L		104	68 - 120
Dibenz(a,h)anthracene	40.0	35.5		ug/L		89	70 - 127
Dibenzofuran	40.0	29.2		ug/L		73	51 - 110
Diethyl phthalate	40.0	32.0		ug/L		80	62 - 120
Dimethyl phthalate	40.0	38.7		ug/L		97	63 - 120
Di-n-butyl phthalate	40.0	33.1		ug/L		83	70 - 120
Di-n-octyl phthalate	40.0	35.8		ug/L		89	70 - 122
Fluoranthene	40.0	36.3		ug/L		91	68 - 120
Fluorene	40.0	29.2		ug/L		73	53 - 120
Hexachlorobenzene	40.0	36.9		ug/L		92	61 - 120
Hexachlorobutadiene	40.0	23.7		ug/L		59	20 - 100
Hexachlorocyclopentadiene	40.0	22.8		ug/L		57	10 - 100
Hexachloroethane	40.0	24.6		ug/L		61	20 - 100
Indeno[1,2,3-cd]pyrene	40.0	36.4		ug/L		91	65 - 133
Isophorone	40.0	37.6		ug/L		94	57 - 110
Naphthalene	40.0	27.2		ug/L		68	36 - 110
Nitrobenzene	40.0	29.9		ug/L		75	53 - 110
N-Nitrosodi-n-propylamine	40.0	32.7		ug/L		82	58 - 110
N-Nitrosodiphenylamine	40.0	34.5		ug/L		86	66 - 110
Pentachlorophenol	80.0	66.6		ug/L		83	23 - 129
Phenol	40.0	18.4		ug/L		46	33 - 100
Pyrene	40.0	33.2		ug/L		83	70 - 110
2,4-Dimethylphenol	40.0	33.5		ug/L		84	51 - 110
Benzo[a]anthracene	40.0	36.3		ug/L		91	70 - 120
Phenanthrene	40.0	31.7		ug/L		79	65 - 120
3,3'-Dichlorobenzidine	40.0	39.9		ug/L		100	60 - 132
3 & 4 Methylphenol	40.0	25.7		ug/L		64	53 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*114*		*40 - 145*
2-Fluorobiphenyl	*76*		*34 - 110*
2-Fluorophenol (Surr)	*76*		*27 - 110*
Nitrobenzene-d5 (Surr)	*87*		*36 - 120*
Phenol-d5 (Surr)	*50*		*20 - 100*
Terphenyl-d14 (Surr)	*92*		*40 - 145*

Lab Sample ID: 480-135500-3 MS
Matrix: Water
Analysis Batch: 431890

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 431418

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	<0.30		39.1	26.7		ug/L		68	26 - 110
1,2-Dichlorobenzene	<0.29		39.1	25.7		ug/L		66	26 - 110
1,3-Dichlorobenzene	<0.25		39.1	23.9		ug/L		61	22 - 110

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

Lab Sample ID: 480-135500-3 MS | **Client Sample ID: SUPE-W-06C-050318**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 431890 | **Prep Batch: 431418**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	<0.27		39.1	24.1		ug/L		62	23 - 110
1-Methylnaphthalene	<0.50		39.1	28.1		ug/L		72	38 - 110
bis(chloroisopropyl) ether	<0.30	^c	39.1	29.9		ug/L		77	38 - 110
2,3,4,6-Tetrachlorophenol	<1.5		39.1	34.0		ug/L		87	44 - 118
2,4,5-Trichlorophenol	<2.3		39.1	31.6		ug/L		81	63 - 120
2,4,6-Trichlorophenol	<1.1		39.1	31.2		ug/L		80	62 - 110
2,4-Dichlorophenol	<2.3		39.1	30.3		ug/L		77	62 - 110
2,4-Dinitrophenol	<7.5	^c	78.1	44.1		ug/L		56	37 - 130
2,4-Dinitrotoluene	<0.30		39.1	34.6		ug/L		89	63 - 122
2,6-Dinitrotoluene	<0.12		39.1	36.8		ug/L		94	63 - 119
2-Chloronaphthalene	<0.34		39.1	28.6		ug/L		73	39 - 110
2-Chlorophenol	<0.80		39.1	28.0		ug/L		72	59 - 110
2-Methylnaphthalene	<0.13		39.1	31.8		ug/L		81	34 - 110
2-Methylphenol	<0.31		39.1	27.7		ug/L		71	53 - 110
2-Nitroaniline	<1.1		39.1	33.4		ug/L		86	59 - 122
2-Nitrophenol	<2.2		39.1	35.7		ug/L		91	58 - 110
3-Nitroaniline	<2.3		39.1	28.3		ug/L		72	47 - 123
4,6-Dinitro-2-methylphenol	<4.9		78.1	60.0		ug/L		77	50 - 117
4-Bromophenyl phenyl ether	<0.92		39.1	31.7		ug/L		81	58 - 120
4-Chloro-3-methylphenol	<2.2		39.1	30.5		ug/L		78	64 - 120
4-Chloroaniline	<2.1		39.1	28.6		ug/L		73	35 - 128
4-Chlorophenyl phenyl ether	<0.81		39.1	30.3		ug/L		77	47 - 112
4-Nitroaniline	<4.0		39.1	24.6		ug/L		63	52 - 147
4-Nitrophenol	<2.4	^c	78.1	25.2		ug/L		32	20 - 110
Acenaphthene	<0.36		39.1	28.0		ug/L		72	46 - 110
Acenaphthylene	<0.32		39.1	29.4		ug/L		75	47 - 110
Anthracene	<0.32		39.1	31.3		ug/L		80	67 - 110
Benzo[a]pyrene	<0.056		39.1	35.4		ug/L		91	70 - 120
Benzo[b]fluoranthene	<0.058		39.1	34.6		ug/L		89	69 - 123
Benzo[g,h,i]perylene	<0.42		39.1	36.9		ug/L		95	70 - 120
Benzo[k]fluoranthene	<0.074		39.1	36.3		ug/L		93	70 - 120
Benzoic acid	<4.6		78.1	26.2		ug/L		33	10 - 100
Benzyl alcohol	<3.1		39.1	29.4		ug/L		75	33 - 127
Bis(2-chloroethoxy)methane	<0.30		39.1	30.3		ug/L		77	60 - 110
Bis(2-chloroethyl)ether	<0.35		39.1	29.5		ug/L		75	49 - 110
Bis(2-ethylhexyl) phthalate	<2.4		39.1	33.2		ug/L		85	69 - 120
Butyl benzyl phthalate	<0.27		39.1	33.4		ug/L		86	68 - 120
Chrysene	<0.14		39.1	40.2		ug/L		103	68 - 120
Dibenz(a,h)anthracene	<0.064		39.1	36.1		ug/L		92	70 - 127
Dibenzofuran	<0.35		39.1	29.1		ug/L		74	51 - 110
Diethyl phthalate	<0.44		39.1	31.5		ug/L		81	62 - 120
Dimethyl phthalate	<0.38		39.1	38.6		ug/L		99	63 - 120
Di-n-butyl phthalate	<0.80		39.1	32.1		ug/L		82	70 - 120
Di-n-octyl phthalate	<2.5		39.1	35.2		ug/L		90	70 - 122
Fluoranthene	<0.32		39.1	35.8		ug/L		92	68 - 120
Fluorene	<0.38		39.1	29.3		ug/L		75	53 - 120
Hexachlorobenzene	<0.14		39.1	36.8		ug/L		94	61 - 120
Hexachlorobutadiene	<1.1		39.1	24.1		ug/L		62	20 - 100

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

Lab Sample ID: 480-135500-3 MS — **Client Sample ID: SUPE-W-06C-050318**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 431890 — **Prep Batch: 431418**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	<3.5	^c	39.1	20.0		ug/L		51	10 - 100
Hexachloroethane	<0.98		39.1	25.2		ug/L		65	20 - 100
Indeno[1,2,3-cd]pyrene	<0.084		39.1	36.2		ug/L		93	65 - 133
Isophorone	<0.29		39.1	37.7		ug/L		96	57 - 110
Naphthalene	<0.30		39.1	28.1		ug/L		72	36 - 110
Nitrobenzene	<0.45		39.1	29.3		ug/L		75	53 - 110
N-Nitrosodi-n-propylamine	<0.14		39.1	31.4		ug/L		80	58 - 110
N-Nitrosodiphenylamine	<0.34		39.1	33.1		ug/L		85	66 - 110
Pentachlorophenol	<5.6		78.1	61.0		ug/L		78	23 - 129
Phenol	<0.36		39.1	16.4		ug/L		42	33 - 100
Pyrene	<0.48		39.1	32.3		ug/L		83	70 - 110
2,4-Dimethylphenol	<3.4		39.1	32.3		ug/L		83	51 - 110
Benzo[a]anthracene	<0.044		39.1	35.4		ug/L		91	70 - 120
Phenanthrene	<0.35		39.1	31.0		ug/L		79	65 - 120
3,3'-Dichlorobenzidine	<0.95		39.1	37.3		ug/L		96	60 - 132
3 & 4 Methylphenol	<0.44		39.1	24.0		ug/L		61	53 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*118*		*40 - 145*
2-Fluorobiphenyl	*81*		*34 - 110*
2-Fluorophenol (Surr)	*71*		*27 - 110*
Nitrobenzene-d5 (Surr)	*87*		*36 - 120*
Phenol-d5 (Surr)	*44*		*20 - 100*
Terphenyl-d14 (Surr)	*87*		*40 - 145*

Lab Sample ID: 480-135500-3 MSD — **Client Sample ID: SUPE-W-06C-050318**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 431890 — **Prep Batch: 431418**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	<0.30		39.0	27.1		ug/L		70	26 - 110	2	20
1,2-Dichlorobenzene	<0.29		39.0	26.1		ug/L		67	26 - 110	2	20
1,3-Dichlorobenzene	<0.25		39.0	24.5		ug/L		63	22 - 110	2	20
1,4-Dichlorobenzene	<0.27		39.0	24.8		ug/L		64	23 - 110	3	20
1-Methylnaphthalene	<0.50		39.0	28.7		ug/L		74	38 - 110	2	20
bis(chloroisopropyl) ether	<0.30	^c	39.0	30.1		ug/L		77	38 - 110	0	20
2,3,4,6-Tetrachlorophenol	<1.5		39.0	35.9		ug/L		92	44 - 118	5	20
2,4,5-Trichlorophenol	<2.3		39.0	32.4		ug/L		83	63 - 120	2	20
2,4,6-Trichlorophenol	<1.1		39.0	32.2		ug/L		83	62 - 110	3	20
2,4-Dichlorophenol	<2.3		39.0	31.1		ug/L		80	62 - 110	3	20
2,4-Dinitrophenol	<7.5	^c	77.9	54.9	F2	ug/L		70	37 - 130	22	20
2,4-Dinitrotoluene	<0.30		39.0	34.6		ug/L		89	63 - 122	0	20
2,6-Dinitrotoluene	<0.12		39.0	37.0		ug/L		95	63 - 119	0	20
2-Chloronaphthalene	<0.34		39.0	29.2		ug/L		75	39 - 110	2	20
2-Chlorophenol	<0.80		39.0	28.2		ug/L		72	59 - 110	1	20
2-Methylnaphthalene	<0.13		39.0	32.2		ug/L		83	34 - 110	1	20
2-Methylphenol	<0.31		39.0	28.0		ug/L		72	53 - 110	1	20
2-Nitroaniline	<1.1		39.0	34.4		ug/L		88	59 - 122	3	20

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

Lab Sample ID: 480-135500-3 MSD | **Client Sample ID: SUPE-W-06C-050318**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 431890 | **Prep Batch: 431418**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitrophenol	<2.2		39.0	35.7		ug/L		92	58 - 110	0	20
3-Nitroaniline	<2.3		39.0	27.3		ug/L		70	47 - 123	4	20
4,6-Dinitro-2-methylphenol	<4.9		77.9	66.8		ug/L		86	50 - 117	11	20
4-Bromophenyl phenyl ether	<0.92		39.0	32.4		ug/L		83	58 - 120	2	20
4-Chloro-3-methylphenol	<2.2		39.0	31.4		ug/L		81	64 - 120	3	20
4-Chloroaniline	<2.1		39.0	28.1		ug/L		72	35 - 128	2	20
4-Chlorophenyl phenyl ether	<0.81		39.0	31.1		ug/L		80	47 - 112	3	20
4-Nitroaniline	<4.0		39.0	22.7		ug/L		58	52 - 147	8	20
4-Nitrophenol	<2.4	^c	77.9	27.9		ug/L		36	20 - 110	10	20
Acenaphthene	<0.36		39.0	28.8		ug/L		74	46 - 110	3	20
Acenaphthylene	<0.32		39.0	30.0		ug/L		77	47 - 110	2	20
Anthracene	<0.32		39.0	31.8		ug/L		82	67 - 110	2	20
Benzo[a]pyrene	<0.056		39.0	35.7		ug/L		92	70 - 120	1	20
Benzo[b]fluoranthene	<0.058		39.0	34.5		ug/L		88	69 - 123	0	20
Benzo[g,h,i]perylene	<0.42		39.0	37.6		ug/L		96	70 - 120	2	20
Benzo[k]fluoranthene	<0.074		39.0	34.9		ug/L		90	70 - 120	4	20
Benzoic acid	<4.6		77.9	34.1	F2	ug/L		44	10 - 100	26	20
Benzyl alcohol	<3.1		39.0	28.7		ug/L		74	33 - 127	2	20
Bis(2-chloroethoxy)methane	<0.30		39.0	30.0		ug/L		77	60 - 110	1	20
Bis(2-chloroethyl)ether	<0.35		39.0	29.6		ug/L		76	49 - 110	0	20
Bis(2-ethylhexyl) phthalate	<2.4		39.0	34.3		ug/L		88	69 - 120	3	20
Butyl benzyl phthalate	<0.27		39.0	35.0		ug/L		90	68 - 120	5	20
Chrysene	<0.14		39.0	41.3		ug/L		106	68 - 120	3	20
Dibenz(a,h)anthracene	<0.064		39.0	35.7		ug/L		92	70 - 127	1	20
Dibenzofuran	<0.35		39.0	30.2		ug/L		77	51 - 110	4	20
Diethyl phthalate	<0.44		39.0	31.5		ug/L		81	62 - 120	0	20
Dimethyl phthalate	<0.38		39.0	39.0		ug/L		100	63 - 120	1	20
Di-n-butyl phthalate	<0.80		39.0	32.7		ug/L		84	70 - 120	2	20
Di-n-octyl phthalate	<2.5		39.0	36.3		ug/L		93	70 - 122	3	20
Fluoranthene	<0.32		39.0	36.0		ug/L		93	68 - 120	1	20
Fluorene	<0.38		39.0	30.0		ug/L		77	53 - 120	2	20
Hexachlorobenzene	<0.14		39.0	37.3		ug/L		96	61 - 120	1	20
Hexachlorobutadiene	<1.1		39.0	25.2		ug/L		65	20 - 100	4	20
Hexachlorocyclopentadiene	<3.5	^c	39.0	21.3		ug/L		55	10 - 100	6	20
Hexachloroethane	<0.98		39.0	26.0		ug/L		67	20 - 100	3	20
Indeno[1,2,3-cd]pyrene	<0.084		39.0	36.5		ug/L		94	65 - 133	1	20
Isophorone	<0.29		39.0	37.8		ug/L		97	57 - 110	0	20
Naphthalene	<0.30		39.0	28.7		ug/L		74	36 - 110	2	20
Nitrobenzene	<0.45		39.0	29.5		ug/L		76	53 - 110	1	20
N-Nitrosodi-n-propylamine	<0.14		39.0	31.6		ug/L		81	58 - 110	1	20
N-Nitrosodiphenylamine	<0.34		39.0	33.5		ug/L		86	66 - 110	1	20
Pentachlorophenol	<5.6		77.9	67.8		ug/L		87	23 - 129	11	20
Phenol	<0.36		39.0	13.7		ug/L		35	33 - 100	18	20
Pyrene	<0.48		39.0	33.1		ug/L		85	70 - 110	2	20
2,4-Dimethylphenol	<3.4		39.0	33.8		ug/L		87	51 - 110	4	20
Benzo[a]anthracene	<0.044		39.0	35.8		ug/L		92	70 - 120	1	20
Phenanthrene	<0.35		39.0	31.9		ug/L		82	65 - 120	3	20
3,3'-Dichlorobenzidine	<0.95		39.0	37.6		ug/L		97	60 - 132	1	20

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

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 431890

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 431418

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3 & 4 Methylphenol	<0.44		39.0	23.9		ug/L		61	53 - 110	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*108*		*40 - 145*
2-Fluorobiphenyl	*70*		*34 - 110*
2-Fluorophenol (Surr)	*63*		*27 - 110*
Nitrobenzene-d5 (Surr)	*75*		*36 - 120*
Phenol-d5 (Surr)	*38*		*20 - 100*
Terphenyl-d14 (Surr)	*74*		*40 - 145*

Lab Sample ID: MB 500-431815/1-A
Matrix: Water
Analysis Batch: 431890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431815

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		2.0	0.30	ug/L		05/11/18 10:16	05/11/18 21:24	1
1,2-Dichlorobenzene	<0.29		2.0	0.29	ug/L		05/11/18 10:16	05/11/18 21:24	1
1,3-Dichlorobenzene	<0.25		2.0	0.25	ug/L		05/11/18 10:16	05/11/18 21:24	1
1,4-Dichlorobenzene	<0.27		2.0	0.27	ug/L		05/11/18 10:16	05/11/18 21:24	1
1-Methylnaphthalene	<0.50		2.0	0.50	ug/L		05/11/18 10:16	05/11/18 21:24	1
bis(chloroisopropyl) ether	<0.30		2.0	0.30	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,3,4,6-Tetrachlorophenol	<1.5		5.0	1.5	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4,5-Trichlorophenol	<2.3		10	2.3	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4,6-Trichlorophenol	<1.1		5.0	1.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4-Dichlorophenol	<2.3		10	2.3	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4-Dinitrophenol	<7.4		20	7.4	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4-Dinitrotoluene	<0.30		1.0	0.30	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,6-Dinitrotoluene	<0.12		1.0	0.12	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Chloronaphthalene	<0.34		2.0	0.34	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Chlorophenol	<0.80		5.0	0.80	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Methylnaphthalene	<0.13		2.0	0.13	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Methylphenol	<0.31		2.0	0.31	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Nitroaniline	<1.1		5.0	1.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
2-Nitrophenol	<2.1		10	2.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
3-Nitroaniline	<2.3		10	2.3	ug/L		05/11/18 10:16	05/11/18 21:24	1
4,6-Dinitro-2-methylphenol	<4.9		20	4.9	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Bromophenyl phenyl ether	<0.91		5.0	0.91	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Chloro-3-methylphenol	<2.2		10	2.2	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Chloroaniline	<2.1		10	2.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Chlorophenyl phenyl ether	<0.81		5.0	0.81	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Nitroaniline	<3.9		10	3.9	ug/L		05/11/18 10:16	05/11/18 21:24	1
4-Nitrophenol	<2.3		20	2.3	ug/L		05/11/18 10:16	05/11/18 21:24	1
Acenaphthene	<0.36		1.0	0.36	ug/L		05/11/18 10:16	05/11/18 21:24	1
Acenaphthylene	<0.32		1.0	0.32	ug/L		05/11/18 10:16	05/11/18 21:24	1
Anthracene	<0.32		1.0	0.32	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzo[a]pyrene	<0.056		0.20	0.056	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzo[b]fluoranthene	<0.058		0.20	0.058	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzo[g,h,i]perylene	<0.42		1.0	0.42	ug/L		05/11/18 10:16	05/11/18 21:24	1

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

Lab Sample ID: MB 500-431815/1-A
Matrix: Water
Analysis Batch: 431890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431815

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<0.074		0.20	0.074	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzoic acid	<4.6		20	4.6	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzyl alcohol	<3.1		20	3.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
Bis(2-chloroethoxy)methane	<0.30		2.0	0.30	ug/L		05/11/18 10:16	05/11/18 21:24	1
Bis(2-chloroethyl)ether	<0.35		2.0	0.35	ug/L		05/11/18 10:16	05/11/18 21:24	1
Bis(2-ethylhexyl) phthalate	<2.4		10	2.4	ug/L		05/11/18 10:16	05/11/18 21:24	1
Butyl benzyl phthalate	<0.27		2.0	0.27	ug/L		05/11/18 10:16	05/11/18 21:24	1
Chrysene	<0.14		0.50	0.14	ug/L		05/11/18 10:16	05/11/18 21:24	1
Dibenz(a,h)anthracene	<0.064		0.30	0.064	ug/L		05/11/18 10:16	05/11/18 21:24	1
Dibenzofuran	<0.35		2.0	0.35	ug/L		05/11/18 10:16	05/11/18 21:24	1
Diethyl phthalate	<0.44		2.0	0.44	ug/L		05/11/18 10:16	05/11/18 21:24	1
Dimethyl phthalate	<0.38		2.0	0.38	ug/L		05/11/18 10:16	05/11/18 21:24	1
Di-n-butyl phthalate	<0.80		5.0	0.80	ug/L		05/11/18 10:16	05/11/18 21:24	1
Di-n-octyl phthalate	<2.5		10	2.5	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,3,5,6-Tetrachlorophenol	<2.5		5.0	2.5	ug/L		05/11/18 10:16	05/11/18 21:24	1
Fluoranthene	<0.32		1.0	0.32	ug/L		05/11/18 10:16	05/11/18 21:24	1
Fluorene	<0.38		1.0	0.38	ug/L		05/11/18 10:16	05/11/18 21:24	1
Hexachlorobenzene	<0.14		0.50	0.14	ug/L		05/11/18 10:16	05/11/18 21:24	1
Hexachlorobutadiene	<1.1		5.0	1.1	ug/L		05/11/18 10:16	05/11/18 21:24	1
Hexachlorocyclopentadiene	<3.4		20	3.4	ug/L		05/11/18 10:16	05/11/18 21:24	1
Hexachloroethane	<0.97		5.0	0.97	ug/L		05/11/18 10:16	05/11/18 21:24	1
Indeno[1,2,3-cd]pyrene	<0.084		0.20	0.084	ug/L		05/11/18 10:16	05/11/18 21:24	1
Isophorone	<0.29		2.0	0.29	ug/L		05/11/18 10:16	05/11/18 21:24	1
Naphthalene	<0.30		1.0	0.30	ug/L		05/11/18 10:16	05/11/18 21:24	1
Nitrobenzene	<0.45		1.0	0.45	ug/L		05/11/18 10:16	05/11/18 21:24	1
N-Nitrosodi-n-propylamine	<0.14		0.50	0.14	ug/L		05/11/18 10:16	05/11/18 21:24	1
N-Nitrosodiphenylamine	<0.34		2.0	0.34	ug/L		05/11/18 10:16	05/11/18 21:24	1
Phenol	<0.36		5.0	0.36	ug/L		05/11/18 10:16	05/11/18 21:24	1
Pyrene	<0.48		1.0	0.48	ug/L		05/11/18 10:16	05/11/18 21:24	1
2,4-Dimethylphenol	<3.3		10	3.3	ug/L		05/11/18 10:16	05/11/18 21:24	1
Benzo[a]anthracene	<0.044		0.20	0.044	ug/L		05/11/18 10:16	05/11/18 21:24	1
Phenanthrene	<0.35		1.0	0.35	ug/L		05/11/18 10:16	05/11/18 21:24	1
3,3'-Dichlorobenzidine	<0.94		5.0	0.94	ug/L		05/11/18 10:16	05/11/18 21:24	1
3 & 4 Methylphenol	<0.44		2.0	0.44	ug/L		05/11/18 10:16	05/11/18 21:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*40 - 145*	*05/11/18 10:16*	*05/11/18 21:24*	*1*
2-Fluorobiphenyl	*94*		*34 - 110*	*05/11/18 10:16*	*05/11/18 21:24*	*1*
2-Fluorophenol (Surr)	*77*		*27 - 110*	*05/11/18 10:16*	*05/11/18 21:24*	*1*
Nitrobenzene-d5 (Surr)	*89*		*36 - 120*	*05/11/18 10:16*	*05/11/18 21:24*	*1*
Phenol-d5 (Surr)	*46*		*20 - 100*	*05/11/18 10:16*	*05/11/18 21:24*	*1*
Terphenyl-d14 (Surr)	*131*		*40 - 145*	*05/11/18 10:16*	*05/11/18 21:24*	*1*

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

Lab Sample ID: LCS 500-431815/2-A
Matrix: Water
Analysis Batch: 431890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	40.0	32.4		ug/L		81	26 - 110
1,2-Dichlorobenzene	40.0	32.3		ug/L		81	26 - 110
1,3-Dichlorobenzene	40.0	30.6		ug/L		76	22 - 110
1,4-Dichlorobenzene	40.0	31.1		ug/L		78	23 - 110
1-Methylnaphthalene	40.0	34.3		ug/L		86	38 - 110
bis(chloroisopropyl) ether	40.0	35.7		ug/L		89	38 - 110
2,3,4,6-Tetrachlorophenol	40.0	40.8		ug/L		102	44 - 118
2,4,5-Trichlorophenol	40.0	38.0		ug/L		95	63 - 120
2,4,6-Trichlorophenol	40.0	37.8		ug/L		95	62 - 110
2,4-Dichlorophenol	40.0	37.5		ug/L		94	62 - 110
2,4-Dinitrophenol	80.0	65.9		ug/L		82	37 - 130
2,4-Dinitrotoluene	40.0	41.6		ug/L		104	63 - 122
2,6-Dinitrotoluene	40.0	43.0		ug/L		107	63 - 119
2-Chloronaphthalene	40.0	34.4		ug/L		86	39 - 110
2-Chlorophenol	40.0	35.1		ug/L		88	59 - 110
2-Methylnaphthalene	40.0	37.7		ug/L		94	34 - 110
2-Methylphenol	40.0	35.7		ug/L		89	53 - 110
2-Nitroaniline	40.0	41.1		ug/L		103	59 - 122
2-Nitrophenol	40.0	43.5		ug/L		109	58 - 110
3-Nitroaniline	40.0	33.8		ug/L		85	47 - 123
4,6-Dinitro-2-methylphenol	80.0	79.6		ug/L		100	50 - 117
4-Bromophenyl phenyl ether	40.0	38.4		ug/L		96	58 - 120
4-Chloro-3-methylphenol	40.0	37.9		ug/L		95	64 - 120
4-Chloroaniline	40.0	35.7		ug/L		89	35 - 128
4-Chlorophenyl phenyl ether	40.0	36.9		ug/L		92	47 - 112
4-Nitroaniline	40.0	28.2		ug/L		70	52 - 147
4-Nitrophenol	80.0	32.4		ug/L		41	20 - 110
Acenaphthene	40.0	34.7		ug/L		87	46 - 110
Acenaphthylene	40.0	35.5		ug/L		89	47 - 110
Anthracene	40.0	38.6		ug/L		96	67 - 110
Benzo[a]pyrene	40.0	41.3		ug/L		103	70 - 120
Benzo[b]fluoranthene	40.0	40.7		ug/L		102	69 - 123
Benzo[g,h,i]perylene	40.0	42.5		ug/L		106	70 - 120
Benzo[k]fluoranthene	40.0	42.5		ug/L		106	70 - 120
Benzoic acid	80.0	45.7		ug/L		57	10 - 100
Benzyl alcohol	40.0	41.1		ug/L		103	33 - 127
Bis(2-chloroethoxy)methane	40.0	37.2		ug/L		93	60 - 110
Bis(2-chloroethyl)ether	40.0	37.2		ug/L		93	49 - 110
Bis(2-ethylhexyl) phthalate	40.0	42.6		ug/L		106	69 - 120
Butyl benzyl phthalate	40.0	42.8		ug/L		107	68 - 120
Chrysene	40.0	51.6	*	ug/L		129	68 - 120
Dibenz(a,h)anthracene	40.0	40.5		ug/L		101	70 - 127
Dibenzofuran	40.0	35.8		ug/L		89	51 - 110
Diethyl phthalate	40.0	37.2		ug/L		93	62 - 120
Dimethyl phthalate	40.0	46.4		ug/L		116	63 - 120
Di-n-butyl phthalate	40.0	38.9		ug/L		97	70 - 120
Di-n-octyl phthalate	40.0	43.3		ug/L		108	70 - 122
Fluoranthene	40.0	41.9		ug/L		105	68 - 120

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

Lab Sample ID: LCS 500-431815/2-A
Matrix: Water
Analysis Batch: 431890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	40.0	35.7		ug/L		89	53 - 120
Hexachlorobenzene	40.0	43.1		ug/L		108	61 - 120
Hexachlorobutadiene	40.0	31.5		ug/L		79	20 - 100
Hexachlorocyclopentadiene	40.0	28.0		ug/L		70	10 - 100
Hexachloroethane	40.0	33.5		ug/L		84	20 - 100
Indeno[1,2,3-cd]pyrene	40.0	42.1		ug/L		105	65 - 133
Isophorone	40.0	46.8	*	ug/L		117	57 - 110
Naphthalene	40.0	34.7		ug/L		87	36 - 110
Nitrobenzene	40.0	35.4		ug/L		89	53 - 110
N-Nitrosodi-n-propylamine	40.0	38.9		ug/L		97	58 - 110
N-Nitrosodiphenylamine	40.0	41.7		ug/L		104	66 - 110
Pentachlorophenol	80.0	84.3		ug/L		105	23 - 129
Phenol	40.0	22.8		ug/L		57	33 - 100
Pyrene	40.0	41.5		ug/L		104	70 - 110
2,4-Dimethylphenol	40.0	40.3		ug/L		101	51 - 110
Benzo[a]anthracene	40.0	43.1		ug/L		108	70 - 120
Phenanthrene	40.0	38.2		ug/L		95	65 - 120
3,3'-Dichlorobenzidine	40.0	44.9		ug/L		112	60 - 132
3 & 4 Methylphenol	40.0	32.0		ug/L		80	53 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*135*		*40 - 145*
2-Fluorobiphenyl	*95*		*34 - 110*
2-Fluorophenol (Surr)	*92*		*27 - 110*
Nitrobenzene-d5 (Surr)	*104*		*36 - 120*
Phenol-d5 (Surr)	*62*		*20 - 100*
Terphenyl-d14 (Surr)	*114*		*40 - 145*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 480-413163/1-A
Matrix: Water
Analysis Batch: 413347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413163

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.057		0.50	0.057	ug/L		05/08/18 14:14	05/09/18 11:59	1
1,3-Dichlorobenzene	<0.082		0.50	0.082	ug/L		05/08/18 14:14	05/09/18 11:59	1
1,4-Dichlorobenzene	<0.068		0.50	0.068	ug/L		05/08/18 14:14	05/09/18 11:59	1
1-Methylnaphthalene	<0.12		0.50	0.12	ug/L		05/08/18 14:14	05/09/18 11:59	1
1,2,4-Trichlorobenzene	<0.092		0.50	0.092	ug/L		05/08/18 14:14	05/09/18 11:59	1
2-Chloronaphthalene	<0.066		0.50	0.066	ug/L		05/08/18 14:14	05/09/18 11:59	1
2-Chlorophenol	<0.066		5.0	0.066	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4-Dichlorophenol	<0.056		0.50	0.056	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4-Dimethylphenol	<0.30		1.0	0.30	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4-Dinitrophenol	<0.60		5.0	0.60	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4-Dinitrotoluene	<0.034		5.0	0.034	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,6-Dinitrotoluene	<0.091		5.0	0.091	ug/L		05/08/18 14:14	05/09/18 11:59	1
2-Methylnaphthalene	<0.052		0.50	0.052	ug/L		05/08/18 14:14	05/09/18 11:59	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 480-413163/1-A
Matrix: Water
Analysis Batch: 413347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413163

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<0.14		1.0	0.14	ug/L		05/08/18 14:14	05/09/18 11:59	1
Methylphenol, 3 & 4	<0.094		1.0	0.094	ug/L		05/08/18 14:14	05/09/18 11:59	1
2-Nitroaniline	<0.095		5.0	0.095	ug/L		05/08/18 14:14	05/09/18 11:59	1
3-Nitroaniline	<0.13		5.0	0.13	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Nitroaniline	<0.025		5.0	0.025	ug/L		05/08/18 14:14	05/09/18 11:59	1
2-Nitrophenol	<0.062		5.0	0.062	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Nitrophenol	<0.39		5.0	0.39	ug/L		05/08/18 14:14	05/09/18 11:59	1
bis(chloroisopropyl) ether	<0.086		5.0	0.086	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,3,4,6-Tetrachlorophenol	<0.39		5.0	0.39	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4,5-Trichlorophenol	<0.065		5.0	0.065	ug/L		05/08/18 14:14	05/09/18 11:59	1
2,4,6-Trichlorophenol	<0.072		5.0	0.072	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Chloro-3-methylphenol	<0.053		5.0	0.053	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Chlorophenyl phenyl ether	<0.046		5.0	0.046	ug/L		05/08/18 14:14	05/09/18 11:59	1
4,6-Dinitro-2-methylphenol	<0.74		5.0	0.74	ug/L		05/08/18 14:14	05/09/18 11:59	1
Acenaphthene	<0.036		0.50	0.036	ug/L		05/08/18 14:14	05/09/18 11:59	1
Acenaphthylene	<0.056		0.30	0.056	ug/L		05/08/18 14:14	05/09/18 11:59	1
Anthracene	<0.034		0.50	0.034	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzo[a]anthracene	<0.034		0.30	0.034	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzo[b]fluoranthene	<0.063		0.30	0.063	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzo[k]fluoranthene	<0.070		0.30	0.070	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzoic acid	<5.0		5.0	5.0	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzo[g,h,i]perylene	<0.058		0.50	0.058	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzo[a]pyrene	<0.13		0.18	0.13	ug/L		05/08/18 14:14	05/09/18 11:59	1
Bis(2-chloroethoxy)methane	<0.064		5.0	0.064	ug/L		05/08/18 14:14	05/09/18 11:59	1
Bis(2-chloroethyl)ether	<0.072		5.0	0.072	ug/L		05/08/18 14:14	05/09/18 11:59	1
Bis(2-ethylhexyl) phthalate	<0.42		5.0	0.42	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Bromophenyl phenyl ether	<0.091		5.0	0.091	ug/L		05/08/18 14:14	05/09/18 11:59	1
Butyl benzyl phthalate	<0.16		3.0	0.16	ug/L		05/08/18 14:14	05/09/18 11:59	1
4-Chloroaniline	<0.13		5.0	0.13	ug/L		05/08/18 14:14	05/09/18 11:59	1
Chrysene	<0.074		0.50	0.074	ug/L		05/08/18 14:14	05/09/18 11:59	1
Dibenz(a,h)anthracene	<0.070		0.50	0.070	ug/L		05/08/18 14:14	05/09/18 11:59	1
Dibenzofuran	<0.060		5.0	0.060	ug/L		05/08/18 14:14	05/09/18 11:59	1
Di-n-butyl phthalate	<0.35		2.0	0.35	ug/L		05/08/18 14:14	05/09/18 11:59	1
Di-n-octyl phthalate	<0.20		5.0	0.20	ug/L		05/08/18 14:14	05/09/18 11:59	1
Diethyl phthalate	<0.064		0.50	0.064	ug/L		05/08/18 14:14	05/09/18 11:59	1
Dimethyl phthalate	<0.057		0.50	0.057	ug/L		05/08/18 14:14	05/09/18 11:59	1
Fluoranthene	<0.080		0.50	0.080	ug/L		05/08/18 14:14	05/09/18 11:59	1
Fluorene	<0.058		0.50	0.058	ug/L		05/08/18 14:14	05/09/18 11:59	1
Hexachlorobenzene	<0.22		0.50	0.22	ug/L		05/08/18 14:14	05/09/18 11:59	1
Hexachlorobutadiene	<0.10		1.0	0.10	ug/L		05/08/18 14:14	05/09/18 11:59	1
Hexachlorocyclopentadiene	<0.091		1.0	0.091	ug/L		05/08/18 14:14	05/09/18 11:59	1
Hexachloroethane	<0.088		5.0	0.088	ug/L		05/08/18 14:14	05/09/18 11:59	1
Indeno[1,2,3-cd]pyrene	<0.11		0.50	0.11	ug/L		05/08/18 14:14	05/09/18 11:59	1
Isophorone	<0.051		0.50	0.051	ug/L		05/08/18 14:14	05/09/18 11:59	1
Naphthalene	<0.064		1.0	0.064	ug/L		05/08/18 14:14	05/09/18 11:59	1
Nitrobenzene	<0.065		0.50	0.065	ug/L		05/08/18 14:14	05/09/18 11:59	1
N-Nitrosodiphenylamine	<0.070		5.0	0.070	ug/L		05/08/18 14:14	05/09/18 11:59	1
N-Nitrosodi-n-propylamine	<0.060		5.0	0.060	ug/L		05/08/18 14:14	05/09/18 11:59	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 480-413163/1-A
Matrix: Water
Analysis Batch: 413347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413163

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.34		1.0	0.34	ug/L		05/08/18 14:14	05/09/18 11:59	1
Phenanthrene	<0.062		0.20	0.062	ug/L		05/08/18 14:14	05/09/18 11:59	1
Phenol	<0.10		1.0	0.10	ug/L		05/08/18 14:14	05/09/18 11:59	1
Pyrene	<0.076		0.50	0.076	ug/L		05/08/18 14:14	05/09/18 11:59	1
Benzyl alcohol	<0.19		5.0	0.19	ug/L		05/08/18 14:14	05/09/18 11:59	1
3,3'-Dichlorobenzidine	<0.22		5.0	0.22	ug/L		05/08/18 14:14	05/09/18 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl-d14	*118*		*64 - 127*	*05/08/18 14:14*	*05/09/18 11:59*	*1*
2-Fluorobiphenyl	*100*		*37 - 120*	*05/08/18 14:14*	*05/09/18 11:59*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 120*	*05/08/18 14:14*	*05/09/18 11:59*	*1*
2,4,6-Tribromophenol (Surr)	*95*		*24 - 146*	*05/08/18 14:14*	*05/09/18 11:59*	*1*
Nitrobenzene-d5 (Surr)	*85*		*26 - 120*	*05/08/18 14:14*	*05/09/18 11:59*	*1*
Phenol-d5 (Surr)	*36*		*11 - 120*	*05/08/18 14:14*	*05/09/18 11:59*	*1*

Lab Sample ID: LCS 480-413163/2-A
Matrix: Water
Analysis Batch: 413579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	8.00	6.41		ug/L		80	47 - 120
1,3-Dichlorobenzene	8.00	6.27		ug/L		78	44 - 120
1,4-Dichlorobenzene	8.00	6.35		ug/L		79	45 - 120
1-Methylnaphthalene	8.00	7.31		ug/L		91	63 - 120
1,2,4-Trichlorobenzene	8.00	7.40		ug/L		93	50 - 120
2-Chloronaphthalene	8.00	7.34		ug/L		92	50 - 120
2-Chlorophenol	8.00	6.59		ug/L		82	63 - 120
2,4-Dichlorophenol	8.00	7.68		ug/L		96	57 - 120
2,4-Dimethylphenol	8.00	5.62		ug/L		70	41 - 120
2,4-Dinitrophenol	16.0	17.1		ug/L		107	32 - 137
2,4-Dinitrotoluene	8.00	8.49		ug/L		106	67 - 120
2,6-Dinitrotoluene	8.00	8.27		ug/L		103	63 - 135
2-Methylnaphthalene	8.00	7.26		ug/L		91	54 - 120
2-Methylphenol	8.00	5.94		ug/L		74	39 - 120
Methylphenol, 3 & 4	8.00	5.60		ug/L		70	37 - 120
2-Nitroaniline	8.00	6.96		ug/L		87	63 - 120
3-Nitroaniline	8.00	9.26		ug/L		116	63 - 150
4-Nitroaniline	8.00	7.79		ug/L		97	63 - 120
2-Nitrophenol	8.00	7.18		ug/L		90	63 - 120
4-Nitrophenol	16.0	8.63		ug/L		54	32 - 120
bis(chloroisopropyl) ether	8.00	5.83		ug/L		73	63 - 125
2,3,4,6-Tetrachlorophenol	8.00	8.65		ug/L		108	63 - 131
2,4,5-Trichlorophenol	8.00	8.97		ug/L		112	63 - 120
2,4,6-Trichlorophenol	8.00	8.19		ug/L		102	63 - 121
4-Chloro-3-methylphenol	8.00	7.64		ug/L		95	64 - 120
4-Chlorophenyl phenyl ether	8.00	8.53		ug/L		107	64 - 120
4,6-Dinitro-2-methylphenol	16.0	16.1		ug/L		100	32 - 138
Acenaphthene	8.00	7.56		ug/L		94	62 - 120

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 480-413163/2-A
Matrix: Water
Analysis Batch: 413579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	8.00	7.54		ug/L		94	57 - 120
Anthracene	8.00	7.93		ug/L		99	65 - 123
Benzo[a]anthracene	8.00	8.18		ug/L		102	77 - 123
Benzo[b]fluoranthene	8.00	8.04		ug/L		100	73 - 123
Benzo[k]fluoranthene	8.00	8.22		ug/L		103	68 - 120
Benzoic acid	64.0	6.32	*	ug/L		10	16 - 120
Benzo[g,h,i]perylene	8.00	8.49		ug/L		106	48 - 150
Benzo[a]pyrene	8.00	8.05		ug/L		101	72 - 120
Bis(2-chloroethoxy)methane	8.00	6.83		ug/L		85	63 - 120
Bis(2-chloroethyl)ether	8.00	6.69		ug/L		84	63 - 120
Bis(2-ethylhexyl) phthalate	8.00	7.70		ug/L		96	63 - 150
4-Bromophenyl phenyl ether	8.00	8.30		ug/L		104	65 - 128
Butyl benzyl phthalate	8.00	7.72		ug/L		96	75 - 127
4-Chloroaniline	8.00	5.91		ug/L		74	63 - 123
Chrysene	8.00	7.81		ug/L		98	75 - 120
Dibenz(a,h)anthracene	8.00	8.48		ug/L		106	54 - 147
Dibenzofuran	8.00	7.88		ug/L		99	63 - 120
Di-n-butyl phthalate	8.00	8.64		ug/L		108	80 - 123
Di-n-octyl phthalate	8.00	8.12		ug/L		101	76 - 135
Diethyl phthalate	8.00	8.57		ug/L		107	71 - 120
Dimethyl phthalate	8.00	8.45		ug/L		106	70 - 120
Fluoranthene	8.00	8.84		ug/L		110	74 - 133
Fluorene	8.00	8.10		ug/L		101	64 - 120
Hexachlorobenzene	8.00	7.69		ug/L		96	61 - 129
Hexachlorobutadiene	8.00	7.75		ug/L		97	45 - 120
Hexachlorocyclopentadiene	8.00	5.39		ug/L		67	21 - 120
Hexachloroethane	8.00	6.17		ug/L		77	63 - 120
Indeno[1,2,3-cd]pyrene	8.00	8.61		ug/L		108	55 - 150
Isophorone	8.00	7.21		ug/L		90	53 - 120
Naphthalene	8.00	6.73		ug/L		84	40 - 138
Nitrobenzene	8.00	6.73		ug/L		84	51 - 120
N-Nitrosodiphenylamine	8.00	7.58		ug/L		95	63 - 120
N-Nitrosodi-n-propylamine	8.00	6.68		ug/L		83	63 - 123
Pentachlorophenol	16.0	10.9		ug/L		68	10 - 131
Phenanthrene	8.00	7.85		ug/L		98	71 - 122
Phenol	8.00	3.04		ug/L		38	17 - 120
Pyrene	8.00	7.71		ug/L		96	65 - 126
Benzyl alcohol	8.00	6.14		ug/L		77	63 - 120
3,3'-Dichlorobenzidine	16.0	20.6		ug/L		129	32 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl-d14	*111*		*64 - 127*
2-Fluorobiphenyl	*97*		*37 - 120*
2-Fluorophenol (Surr)	*55*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*97*		*24 - 146*
Nitrobenzene-d5 (Surr)	*79*		*26 - 120*
Phenol-d5 (Surr)	*37*		*11 - 120*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 480-135500-3 MS
Matrix: Water
Analysis Batch: 413347

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 413163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	<0.34	^c	16.0	12.1		ug/L		76	10 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*96*		*24 - 146*
2-Fluorobiphenyl	*98*		*37 - 120*
2-Fluorophenol (Surr)	*56*		*10 - 120*
Nitrobenzene-d5 (Surr)	*92*		*26 - 120*
Phenol-d5 (Surr)	*37*		*11 - 120*
p-Terphenyl-d14	*95*		*64 - 127*

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 413347

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 413163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	<0.34	^c	16.0	11.6		ug/L		73	10 - 131	4	37

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*24 - 146*
2-Fluorobiphenyl	*88*		*37 - 120*
2-Fluorophenol (Surr)	*50*		*10 - 120*
Nitrobenzene-d5 (Surr)	*75*		*26 - 120*
Phenol-d5 (Surr)	*34*		*11 - 120*
p-Terphenyl-d14	*90*		*64 - 127*

GC/MS VOA

Analysis Batch: 413737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	8260C	
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	8260C	
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	8260C	
MB 480-413737/8	Method Blank	Total/NA	Water	8260C	
LCS 480-413737/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 413745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-15	SUPE-W-TB-01-050218	Total/NA	Water	8260C	
MB 480-413745/7	Method Blank	Total/NA	Water	8260C	
LCS 480-413745/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 413988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	8260C	
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	8260C	
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	8260C	
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	8260C	
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	8260C	
480-135500-9	SUPE-W-99-050318	Total/NA	Water	8260C	
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	8260C	
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	8260C	
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	8260C	
480-135500-13	SUPE-TB-02-050318	Total/NA	Water	8260C	
MB 480-413988/7	Method Blank	Total/NA	Water	8260C	
LCS 480-413988/5	Lab Control Sample	Total/NA	Water	8260C	
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	8260C	
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 413163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	3510C	
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	3510C	
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	3510C	
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	3510C	
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	3510C	
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	3510C	
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	3510C	
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	3510C	
480-135500-9	SUPE-W-99-050318	Total/NA	Water	3510C	
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	3510C	
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	3510C	
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	3510C	
480-135500-14	SUPE-W-18D-050318	Total/NA	Water	3510C	
MB 480-413163/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-413163/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	3510C	
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Analysis Batch: 413347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	8270D LL	413163
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	8270D LL	413163
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	8270D LL	413163
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	8270D LL	413163
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	8270D LL	413163
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	8270D LL	413163
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	8270D LL	413163
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	8270D LL	413163
480-135500-9	SUPE-W-99-050318	Total/NA	Water	8270D LL	413163
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	8270D LL	413163
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	8270D LL	413163
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	8270D LL	413163
480-135500-14	SUPE-W-18D-050318	Total/NA	Water	8270D LL	413163
MB 480-413163/1-A	Method Blank	Total/NA	Water	8270D LL	413163
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	8270D LL	413163
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	8270D LL	413163

Analysis Batch: 413579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-413163/2-A	Lab Control Sample	Total/NA	Water	8270D LL	413163

Prep Batch: 431418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	3510C	
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	3510C	
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	3510C	
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	3510C	
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	3510C	
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	3510C	
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	3510C	
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	3510C	
480-135500-9	SUPE-W-99-050318	Total/NA	Water	3510C	
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	3510C	
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	3510C	
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	3510C	
MB 500-431418/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-431418/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	3510C	
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	3510C	

Analysis Batch: 431644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	8270D	431418
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	8270D	431418
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	8270D	431418
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	8270D	431418
MB 500-431418/1-A	Method Blank	Total/NA	Water	8270D	431418
LCS 500-431418/2-A	Lab Control Sample	Total/NA	Water	8270D	431418

GC/MS Semi VOA (Continued)

Prep Batch: 431815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-14	SUPE-W-18D-050318	Total/NA	Water	3510C	
MB 500-431815/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-431815/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 431890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	8270D	431418
480-135500-14	SUPE-W-18D-050318	Total/NA	Water	8270D	431815
MB 500-431815/1-A	Method Blank	Total/NA	Water	8270D	431815
LCS 500-431815/2-A	Lab Control Sample	Total/NA	Water	8270D	431815
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	8270D	431418
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	8270D	431418

Analysis Batch: 431968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	8270D	431418
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	8270D	431418
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	8270D	431418
480-135500-9	SUPE-W-99-050318	Total/NA	Water	8270D	431418
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	8270D	431418
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	8270D	431418
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	8270D	431418

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-W-06A-050218
Lab Sample ID: 480-135500-1
Date Collected: 05/02/18 15:44
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413737	05/11/18 01:39	S1V	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431644	05/10/18 22:55	WDS	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 14:25	RJS	TAL BUF

Client Sample ID: SUPE-EB-01-050218
Lab Sample ID: 480-135500-2
Date Collected: 05/02/18 17:15
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413737	05/11/18 02:03	S1V	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431644	05/10/18 23:19	WDS	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 14:54	RJS	TAL BUF

Client Sample ID: SUPE-W-06C-050318
Lab Sample ID: 480-135500-3
Date Collected: 05/03/18 09:25
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 01:48	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431890	05/12/18 02:06	GES	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 13:56	RJS	TAL BUF

Client Sample ID: SUPE-W-12A-050318
Lab Sample ID: 480-135500-4
Date Collected: 05/03/18 11:55
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 02:15	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431644	05/10/18 23:44	WDS	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 15:24	RJS	TAL BUF

Client Sample ID: SUPE-W-12CR-050318

Lab Sample ID: 480-135500-5
Date Collected: 05/03/18 14:07
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 02:42	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431644	05/11/18 00:08	WDS	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 15:53	RJS	TAL BUF

Client Sample ID: SUPE-EB-02-050318

Lab Sample ID: 480-135500-6
Date Collected: 05/03/18 14:42
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 03:09	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/12/18 21:44	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 16:22	RJS	TAL BUF

Client Sample ID: SUPE-W-30A-050318

Lab Sample ID: 480-135500-7
Date Collected: 05/03/18 15:40
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 03:36	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/12/18 22:12	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 16:52	RJS	TAL BUF

Client Sample ID: SUPE-W-30C-050318

Lab Sample ID: 480-135500-8
Date Collected: 05/02/18 15:52
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413737	05/11/18 02:27	S1V	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/12/18 22:40	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 17:21	RJS	TAL BUF

Client Sample ID: SUPE-W-99-050318

Lab Sample ID: 480-135500-9
Matrix: Water
Date Collected: 05/03/18 01:01
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 04:03	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/12/18 23:07	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 17:50	RJS	TAL BUF

Client Sample ID: SUPE-W-28C-050318

Lab Sample ID: 480-135500-10
Matrix: Water
Date Collected: 05/03/18 11:13
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 04:30	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/12/18 23:35	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 18:19	RJS	TAL BUF

Client Sample ID: SUPE-W-10AR2-050318

Lab Sample ID: 480-135500-11
Matrix: Water
Date Collected: 05/03/18 15:54
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 04:57	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/13/18 00:02	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 18:49	RJS	TAL BUF

Client Sample ID: SUPE-W-04AR2-050318

Lab Sample ID: 480-135500-12
Matrix: Water
Date Collected: 05/03/18 13:28
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 05:24	AMM	TAL BUF
Total/NA	Prep	3510C			431418	05/09/18 14:20	DX	TAL CHI
Total/NA	Analysis	8270D		1	431968	05/13/18 00:30	AJD	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 19:18	RJS	TAL BUF

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Client Sample ID: SUPE-TB-02-050318

Lab Sample ID: 480-135500-13

Date Collected: 05/03/18 00:00
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413988	05/12/18 01:21	AMM	TAL BUF

Client Sample ID: SUPE-W-18D-050318

Lab Sample ID: 480-135500-14

Date Collected: 05/03/18 09:29
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			431815	05/11/18 15:25	DX	TAL CHI
Total/NA	Analysis	8270D		1	431890	05/12/18 01:40	GES	TAL CHI
Total/NA	Prep	3510C			413163	05/08/18 14:14	ATG	TAL BUF
Total/NA	Analysis	8270D LL		1	413347	05/09/18 19:47	RJS	TAL BUF

Client Sample ID: SUPE-W-TB-01-050218

Lab Sample ID: 480-135500-15

Date Collected: 05/02/18 00:00
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	413745	05/11/18 08:26	LCH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998310390	08-31-18

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

Analysis Method	Prep Method	Matrix	Analyte
8270D LL	3510C	Water	2-Chlorophenol
8270D LL	3510C	Water	2-Methylphenol
8270D LL	3510C	Water	2-Nitrophenol

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	08-31-18

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	04-30-19
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-19
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-19
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-19
North Carolina (WW/SW)	State Program	4	434	12-31-18
Oregon	NELAP Secondary AB	10	PA-2151	01-28-19
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-18 *
Texas	NELAP	6	T104704528-15-2	03-31-19
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18 *
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-19
Wisconsin	State Program	5	998027800	08-31-18

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

Method Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-135500-1	SUPE-W-06A-050218	Water	05/02/18 15:44	05/05/18 09:00
480-135500-2	SUPE-EB-01-050218	Water	05/02/18 17:15	05/05/18 09:00
480-135500-3	SUPE-W-06C-050318	Water	05/03/18 09:25	05/05/18 09:00
480-135500-4	SUPE-W-12A-050318	Water	05/03/18 11:55	05/05/18 09:00
480-135500-5	SUPE-W-12CR-050318	Water	05/03/18 14:07	05/05/18 09:00
480-135500-6	SUPE-EB-02-050318	Water	05/03/18 14:42	05/05/18 09:00
480-135500-7	SUPE-W-30A-050318	Water	05/03/18 15:40	05/05/18 09:00
480-135500-8	SUPE-W-30C-050318	Water	05/02/18 15:52	05/05/18 09:00
480-135500-9	SUPE-W-99-050318	Water	05/03/18 01:01	05/05/18 09:00
480-135500-10	SUPE-W-28C-050318	Water	05/03/18 11:13	05/05/18 09:00
480-135500-11	SUPE-W-10AR2-050318	Water	05/03/18 15:54	05/05/18 09:00
480-135500-12	SUPE-W-04AR2-050318	Water	05/03/18 13:28	05/05/18 09:00
480-135500-13	SUPE-TB-02-050318	Water	05/03/18 00:00	05/05/18 09:00
480-135500-14	SUPE-W-18D-050318	Water	05/03/18 09:29	05/05/18 09:00
480-135500-15	SUPE-W-TB-01-050218	Water	05/02/18 00:00	05/05/18 09:00

Quantitation Limit Exceptions Summary

Client: Field & Technical Services LLC
TestAmerica Job ID: 480-135500-1
Project/Site: Superior, WI Semiannual Groundwater

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8260C	Water	1,1,1-Trichloroethane	ug/L	1.0	2.7333
8260C	Water	1,2,4-Trimethylbenzene	ug/L	1.0	2.500
8260C	Water	1,3,5-Trimethylbenzene	ug/L	1.0	2.5667
8260C	Water	Benzene	ug/L	1.0	1.3667
8260C	Water	Chloromethane	ug/L	1.0	1.1667
8260C	Water	Ethylbenzene	ug/L	1.0	2.4667
8260C	Water	m-Xylene & p-Xylene	ug/L	2.0	2.200
8260C	Water	Naphthalene	ug/L	1.0	1.4333
8260C	Water	n-Butylbenzene	ug/L	1.0	2.1333
8260C	Water	N-Propylbenzene	ug/L	1.0	2.300
8260C	Water	o-Xylene	ug/L	1.0	2.5333
8260C	Water	Styrene	ug/L	1.0	2.4333
8260C	Water	Toluene	ug/L	1.0	1.700
8260C	Water	Xylenes, Total	ug/L	2.0	2.200
8270D LL	Water	Benzo[a]pyrene	ug/L	0.18	0.433
8270D LL	Water	Hexachlorobenzene	ug/L	0.50	0.7333
8270D LL	Water	Pentachlorophenol	ug/L	1.0	1.1357
8270D LL	Water	Phenanthrene	ug/L	0.20	0.2066

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.#
*500

480-135500 COC

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@fts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)														Notes:
				Preservative	None														
				Total Bottle Count															
05/02/2018	1552	GW	SUPE-W-30C-050218	3	3														

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name:	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500784

500784

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans														
				Preservative	None														
				Total Bottle Count															Notes:
05/02/2018	1552	GW	SUPE-W-30C-050218	2	2														

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	[ ] Rush
Printed Name: Ben Trask	Printed Name: Nikolb	Printed Name:	Printed Name:	[X] Standard
Firm: FTS	Firm: TA	Firm:	Firm:	
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500677

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC+naphtha	8270C_SVOC (less naphtha)															Notes:
				Preservative	None	None															
				Total Bottle Count																	
05/03/2018	0101	GW	SUPE-W-99-050318	3	0	3															
05/03/2018	0929	GW	SUPE-W-18D-050318	3	3	0															
05/03/2018	1113	GW	SUPE-W-28C-050318	3	0	3															
05/03/2018	1554	GW	SUPE-W-10AR2-050318	3	0	3															
5/3/2018	1828	GW	SUPE-W-04AR2 050318	3	0	3															

3.3
Temp 3.6#/ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name:	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500679

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans																	Notes:
				Preservative	None																	
				Total Bottle Count																		
05/03/2018	0101	GW	SUPE-W-99-050318	2	2	0																
05/03/2018	1113	GW	SUPE-W-28C-050318	2	2	0																
05/03/2018	1554	GW	SUPE-W-10AR2-050318	2	2	0																
5/3/18	1328	GW	SUPE-W-04AR2 050318	2	2	0																

3.3
Temp 3.6 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name:	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 5/5/18 0900	Date/Time:	Date/Time:	

Page 1 of 1

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500678

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAPIT
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha																	Notes:
				Preservative	HCL																	
				Total Bottle Count																		
05/03/2018	0000	GW	SUPE-TB-02-050318	2	2	0																
05/03/2018	0101	GW	SUPE-W-99-050318	3	3	0																
05/03/2018	1113	GW	SUPE-W-28C-050318	3	3	0																
05/03/2018	1554	GW	SUPE-W-10AR2-050318	3	3	0																
5/3/18	1328	GW	SUPE-W-04AR2-050318	3	3	0																

3.3
Temp 3.6 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Brendan Rick	Signature: Chris Kow	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Chris Kow	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500785

500785

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0553-18
Laboratory: TAPIT
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@fts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha													Notes:
				Preservative	HCL													
				Total Bottle Count														
05/02/2018	0000	GW	SUPE-TB-01-050218	2	2													
05/02/2018	1552	GW	SUPE-W-30C-050218	3	3													

Temp 2.7 #ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Nikolo	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500672

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0553-18
Laboratory: TAPIT
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (412) 680-4312
brick.2003@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha													Notes:
				Preservative	HCL													
				Total Bottle Count														
05/02/2018	1544	GW	SUPE-W-06A-050218	3	3													
05/02/2018	1715	GW	SUPE-EB-01-050218	3	3													

2.9
Temp 2.7 #(ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Likolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500673

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (412) 680-4312
brick.2003@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)													Notes:
				Preservative	None													
				Total Bottle Count														
05/02/2018	1544	GW	SUPE-W-08A-050218	3	3													
05/02/2018	1715	GW	SUPE-EB-01-050218	3	3													

2,7
Temp 2,7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: [signature]	Signature: [signature]	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: LiKolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500671

Project Name:	Superior 2018 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-18	Address:	200 Third Avenue	Contact	(412) 680-4312
Laboratory:	TAKNOX		Carnegie, PA 15106		brick.2003@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2018 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans														Notes:
				Preservative	None														
				Total Bottle Count															
05/02/2018	1544	GW	SUPE-W-06A-050218	2	2														
05/02/2018	1715	GW	SUPE-EB-01-050218	2	2														

29

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Nikolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500791

500791

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAPIT
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha															Notes:
				Preservative	HCL															
				Total Bottle Count																
05/03/2018	0925	GW	SUPE-W-06C-050318	3	3															
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	6	6															
05/03/2018	1155	GW	SUPE-W-12A-050318	3	3															
05/03/2018	1407	GW	SUPE-W-12CR-050318	3	3															
05/03/2018	1442	GW	SUPE-EB-02-050318	3	3															
05/03/2018	1540	GW	SUPE-W-30A-050318	3	3															

3.2
Temp 3.0@1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Ben Trask	Signature: Nicholas	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Nicolb	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500790

500790

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)															Notes:
				Preservative	None															
				Total Bottle Count																
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	6	6															
05/03/2018	0925	GW	SUPE-W-06C-050318	3	3															
05/03/2018	1155	GW	SUPE-W-12A-050318	3	3															
05/03/2018	1407	GW	SUPE-W-12CR-050318	3	3															
05/03/2018	1442	GW	SUPE-EB-02-050318	3	3															
05/03/2018	1540	GW	SUPE-W-30A-050318	3	3															

3.2
Temp 3.0 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Likolb	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500789

500789

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans															Notes:
				Preservative	None															
				Total Bottle Count																
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	4	4															
05/03/2018	0925	GW	SUPE-W-06C-050318	2	2															
05/03/2018	1155	GW	SUPE-W-12A-050318	2	2															
05/03/2018	1407	GW	SUPE-W-12CR-050318	2	2															
05/03/2018	1442	GW	SUPE-EB-02-050318	2	2															
05/03/2018	1540	GW	SUPE-W-30A-050318	2	2															

3.2
Temp 3.0 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Ben Trask	Signature: Cwilkow	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Likolb	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

Page 1 of 1

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 480-42040.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Wisconsin	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 480-135500-1
Address: 5815 Middlebrook Pike, ,	Due Date Requested: 5/23/2018			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37921				
Phone: 865-291-3000(Tel) 865-584-4315(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior, WI Semiannual Groundwater	Project #: 18015916			
Site:	SSOW#:			

Analysis Requested

480-135500 Chain of Custody

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8290A/8290_P_Sep 17 Isomers + Totals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SUPE-W-06A-050218 (480-135500-1)	5/2/18	15:44 Central		Water			X	2	CUSTODY SEALS INTACT
SUPE-EB-01-050218 (480-135500-2)	5/2/18	17:15 Central		Water			X	2	RECEIVED AT
SUPE-W-6C-050318 (480-135500-3)	5/3/18	09:25 Central		Water			X	2	RT 2.4, 1.7, 2.1°C
SUPE-W-6C-050318 (480-135500-3MS)	5/3/18	09:25 Central	MS	Water			X	2	CT 2.4, 1.7, 2.1°C
SUPE-W-6C-050318 (480-135500-3MSD)	5/3/18	09:25 Central	MSD	Water			X	2	AKD 5-9-18
SUPE-W-12A-050318 (480-135500-4)	5/3/18	11:55 Central		Water			X	2	3 COOLERS FEDEX #
SUPE-W-12CR-050318 (480-135500-5)	5/3/18	14:07 Central		Water			X	2	427607168637 M PJ
SUPE-EB-02-050318 (480-135500-6)	5/3/18	14:42 Central		Water			X	2	
SUPE-W-30A-050318 (480-135500-7)	5/3/18	15:40 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/10/18 1600	Company: DDS	Received by:	Date/Time: 5-9-18 09:45	Company: FedEx
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 480-42040.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Wisconsin	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 480-135500-1
Address: 5815 Middlebrook Pike, ,	Due Date Requested: 5/23/2018			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37921				
Phone: 865-291-3000(Tel) 865-584-4315(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior, WI Semiannual Groundwater	Project #: 18015916			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8290A/8290_P_Sep 17 Isomers + Totals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SUPE-W-30C-050318 (480-135500-8)	5/2/18	15:52 Central		Water			X	2	
SUPE-W-99-050318 (480-135500-9)	5/3/18	01:01 Central		Water			X	2	
SUPE-W-28C-050318 (480-135500-10)	5/3/18	11:13 Central		Water			X	2	
SUPE-W-10AR2-050318 (480-135500-11)	5/3/18	15:54 Central		Water			X	2	
SUPE-W-04AR2-050318 (480-135500-12)	5/3/18	13:28 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/10/18 1600			5-9-18 09:25	TA KNX
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

Loc: 480
135500

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SG68 Correction factor: 0.0°C	✓			☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?			✓	☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, lab will adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 5-9-18

QA026R30.doc, 080916

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 480-42039.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Wisconsin	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 480-135500-1
Address: 2417 Bond Street, ,	Due Date Requested: 5/22/2018			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior, WI Semiannual Groundwater	Project #: 18015916			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D/3510C (MOD) Semivolatiles, project list with n	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SUPE-W-06A-050218 (480-135500-1)	5/2/18	15:44 Central		Water			X	2	
SUPE-EB-01-050218 (480-135500-2)	5/2/18	17:15 Central		Water			X	2	
SUPE-W-6C-050318 (480-135500-3)	5/3/18	09:25 Central		Water			X	2	
SUPE-W-6C-050318 (480-135500-3MS)	5/3/18	09:25 Central	MS	Water			X	2	
SUPE-W-6C-050318 (480-135500-3MSD)	5/3/18	09:25 Central	MSD	Water			X	2	
SUPE-W-12A-050318 (480-135500-4)	5/3/18	11:55 Central		Water			X	2	
SUPE-W-12CR-050318 (480-135500-5)	5/3/18	14:07 Central		Water			X	2	
SUPE-EB-02-050318 (480-135500-6)	5/3/18	14:42 Central		Water			X	2	
SUPE-W-30A-050318 (480-135500-7)	5/3/18	15:40 Central		Water			X	2	

480-135500 COC

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/2/18 1600			05/09/18 0930	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: (1.8 → 3.3) (0.8 → 2.3) (3.7)

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 480-42039.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Wisconsin	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 480-135500-1
Address: 2417 Bond Street, ,	Due Date Requested: 5/22/2018			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior, WI Semiannual Groundwater	Project #: 18015916			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D/3510C (MOD) Semivolatiles, project list with n	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SUPE-W-30C-050318 (480-135500-8)	5/2/18	15:52 Central		Water			X	2	
SUPE-W-99-050318 (480-135500-9)	5/3/18	01:01 Central		Water			X	2	
SUPE-W-28C-050318 (480-135500-10)	5/3/18	11:13 Central		Water			X	2	
SUPE-W-10AR2-050318 (480-135500-11)	5/3/18	15:54 Central		Water			X	2	
SUPE-W-04AR2-050318 (480-135500-12)	5/3/18	13:28 Central		Water			X	2	

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Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 05/09/18 0930	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER in ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 480-42143.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 480-135500-1
Address: 2417 Bond Street,	Due Date Requested: 5/22/2018			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior, WI Semiannual Groundwater	Project #: 18015916			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D/3510C (MOD) Semivolatiles, project list with n	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SUPE-W-18D-050318 (480-135500-14)	5/3/18	09:29 Central		Water			X	2	

480-135500 COC

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Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/10/18 1630			05/11/18 0910	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: -0.2 → 1.3

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 480-135500-1

Login Number: 135500
List Number: 1
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

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	
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	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 480-135500-1

Login Number: 135500
List Number: 2
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago
List Creation: 05/09/18 10:41 AM

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	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 480-135500-1

Login Number: 135500
List Number: 4
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago
List Creation: 05/11/18 12:36 PM

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	
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.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-135500-2
Client Project/Site: Superior, WI Semiannual Groundwater

For:
Field & Technical Services LLC
200 Third Avenue
Carnegie, Pennsylvania 15106

Attn: Ms. Angie Gatchie

Authorized for release by:
6/11/2018 8:57:40 AM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.
F2	MS/MSD RPD exceeds control limits

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)

Job ID: 480-135500-2

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-135500-2

Comments
No additional comments.

Receipt
The samples were received on 5/5/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 2.7º C, 2.9º C, 3.0º C, 3.2º C, 3.3º C and 3.6º C.

Dioxin
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: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-06A-050218 — Lab Sample ID: 480-135500-1

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDD	6.6	J	48	0.45	pg/L	1		8290A	Total/NA
Total HpCDD	29	J	48	0.45	pg/L	1		8290A	Total/NA
OCDD	55	J	97	0.10	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-EB-01-050218 — Lab Sample ID: 480-135500-2

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
OCDD	3.8	J	100	0.054	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-06C-050318 — Lab Sample ID: 480-135500-3

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
Total PeCDD	1.9	J	48	0.63	pg/L	1		8290A	Total/NA
OCDD	8.5	J	96	0.18	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-12A-050318 — Lab Sample ID: 480-135500-4

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDD	30	J	48	1.4	pg/L	1		8290A	Total/NA
Total HpCDD	60		48	1.4	pg/L	1		8290A	Total/NA
OCDD	270		96	0.48	pg/L	1		8290A	Total/NA
Total PeCDF	9.2	J	48	0.58	pg/L	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	2.6	J	48	0.61	pg/L	1		8290A	Total/NA
Total HxCDF	22	J	48	0.64	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	8.2	J	48	0.22	pg/L	1		8290A	Total/NA
Total HpCDF	28	J	48	0.26	pg/L	1		8290A	Total/NA
OCDF	26	J	96	1.5	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-12CR-050318 — Lab Sample ID: 480-135500-5

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
OCDD	31	J	100	0.23	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-EB-02-050318 — Lab Sample ID: 480-135500-6

No Detections.

Client Sample ID: SUPE-W-30A-050318 — Lab Sample ID: 480-135500-7

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,6,7,8-HxCDD	11	J	53	0.27	pg/L	1		8290A	Total/NA
Total HxCDD	38	J	53	0.25	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	220		53	1.9	pg/L	1		8290A	Total/NA
Total HpCDD	520		53	1.9	pg/L	1		8290A	Total/NA
OCDD	2800		110	0.72	pg/L	1		8290A	Total/NA
Total TCDF	11		11	1.0	pg/L	1		8290A	Total/NA
Total PeCDF	47	J	53	0.83	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	10	J	53	1.4	pg/L	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	11	J	53	1.4	pg/L	1		8290A	Total/NA
Total HxCDF	200		53	1.5	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	82		53	1.1	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SUPE-W-30A-050318 (Continued) — Lab Sample ID: 480-135500-7

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,7,8,9-HpCDF	9.5	J	53	1.3	pg/L	1		8290A	Total/NA
Total HpCDF	310		53	1.2	pg/L	1		8290A	Total/NA
OCDF	240		110	1.7	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-30C-050318 — Lab Sample ID: 480-135500-8

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDD	9.2	J	48	0.23	pg/L	1		8290A	Total/NA
Total HpCDD	25	J	48	0.23	pg/L	1		8290A	Total/NA
OCDD	190		95	0.72	pg/L	1		8290A	Total/NA
Total HpCDF	5.5	J	48	0.14	pg/L	1		8290A	Total/NA
OCDF	18	J	95	2.1	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-99-050318 — Lab Sample ID: 480-135500-9

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDD	2.7	J	49	0.52	pg/L	1		8290A	Total/NA
Total HpCDD	11	J	49	0.52	pg/L	1		8290A	Total/NA
OCDD	41	J	99	0.17	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-28C-050318 — Lab Sample ID: 480-135500-10

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HxCDD	1.9	J	48	0.18	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	7.9	J	48	0.43	pg/L	1		8290A	Total/NA
Total HpCDD	28	J	48	0.43	pg/L	1		8290A	Total/NA
OCDD	80	J	96	0.73	pg/L	1		8290A	Total/NA
Total HxCDF	0.91	J	48	0.13	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	5.8	J	48	0.21	pg/L	1		8290A	Total/NA
Total HpCDF	11	J	48	0.26	pg/L	1		8290A	Total/NA
OCDF	13	J	96	2.0	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-10AR2-050318 — Lab Sample ID: 480-135500-11

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDD	11	J	48	0.74	pg/L	1		8290A	Total/NA
Total HpCDD	44	J	48	0.74	pg/L	1		8290A	Total/NA
OCDD	110		95	0.21	pg/L	1		8290A	Total/NA
Total HxCDF	1.7	J	48	0.076	pg/L	1		8290A	Total/NA
Total HpCDF	7.3	J	48	0.039	pg/L	1		8290A	Total/NA
OCDF	8.9	J	95	1.0	pg/L	1		8290A	Total/NA

Client Sample ID: SUPE-W-04AR2-050318 — Lab Sample ID: 480-135500-12

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDD	0.63	J	50	0.10	pg/L	1		8290A	Total/NA
Total PeCDD	0.63	J	50	0.10	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	2.0	J	50	0.11	pg/L	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	4.9	J	50	0.13	pg/L	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	3.2	J	50	0.11	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SUPE-W-04AR2-050318 (Continued)

Lab Sample ID: 480-135500-12

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HxCDD	34	J	50	0.12	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	160		50	0.41	pg/L	1		8290A	Total/NA
Total HpCDD	390		50	0.41	pg/L	1		8290A	Total/NA
OCDD	1300		99	0.20	pg/L	1		8290A	Total/NA
Total TCDF	1.9	J	9.9	0.14	pg/L	1		8290A	Total/NA
Total PeCDF	6.9	J	50	0.17	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	3.2	J	50	0.33	pg/L	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	2.7	J	50	0.32	pg/L	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	1.0	J	50	0.30	pg/L	1		8290A	Total/NA
Total HxCDF	61		50	0.32	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	37	J	50	0.17	pg/L	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	2.3	J	50	0.21	pg/L	1		8290A	Total/NA
Total HpCDF	140		50	0.19	pg/L	1		8290A	Total/NA
OCDF	100		99	0.37	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SUPE-W-06A-050218

Date Collected: 05/02/18 15:44
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-1

Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.1		9.7	3.1	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total TCDD	<3.1		9.7	3.1	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,7,8-PeCDD	<0.72		48	0.72	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total PeCDD	<0.72		48	0.72	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,4,7,8-HxCDD	<0.27		48	0.27	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,6,7,8-HxCDD	<0.31		48	0.31	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,7,8,9-HxCDD	<0.27		48	0.27	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total HxCDD	<0.31		48	0.31	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,4,6,7,8-HpCDD	**6.6**	**J**	48	0.45	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total HpCDD	**29**	**J**	48	0.45	pg/L		05/11/18 07:00	06/07/18 02:27	1
OCDD	**55**	**J**	97	0.10	pg/L		05/11/18 07:00	06/07/18 02:27	1
2,3,7,8-TCDF	<1.3		9.7	1.3	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total TCDF	<1.3		9.7	1.3	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,7,8-PeCDF	<0.23		48	0.23	pg/L		05/11/18 07:00	06/07/18 02:27	1
2,3,4,7,8-PeCDF	<0.20		48	0.20	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total PeCDF	<0.23		48	0.23	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,4,7,8-HxCDF	<0.074		48	0.074	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,6,7,8-HxCDF	<0.074		48	0.074	pg/L		05/11/18 07:00	06/07/18 02:27	1
2,3,4,6,7,8-HxCDF	<0.077		48	0.077	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,7,8,9-HxCDF	<0.085		48	0.085	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total HxCDF	<0.085		48	0.085	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,4,6,7,8-HpCDF	<0.30		48	0.30	pg/L		05/11/18 07:00	06/07/18 02:27	1
1,2,3,4,7,8,9-HpCDF	<0.40		48	0.40	pg/L		05/11/18 07:00	06/07/18 02:27	1
Total HpCDF	<0.40		48	0.40	pg/L		05/11/18 07:00	06/07/18 02:27	1
OCDF	<1.0		97	1.0	pg/L		05/11/18 07:00	06/07/18 02:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,7,8-PeCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,4,7,8-HxCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,6,7,8-HxCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-OCDD	*63*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-2,3,7,8-TCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,7,8-PeCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-2,3,4,7,8-PeCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,4,7,8-HxCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,6,7,8-HxCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-2,3,4,6,7,8-HxCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,7,8,9-HxCDF	*82*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*
13C-OCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 02:27*	*1*

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-EB-01-050218
Date Collected: 05/02/18 17:15
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-2
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.4		10	3.4	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total TCDD	<3.4		10	3.4	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,7,8-PeCDD	<0.63		52	0.63	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total PeCDD	<0.63		52	0.63	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,4,7,8-HxCDD	<0.095		52	0.095	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,6,7,8-HxCDD	<0.096		52	0.096	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,7,8,9-HxCDD	<0.089		52	0.089	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total HxCDD	<0.096		52	0.096	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,4,6,7,8-HpCDD	<0.36		52	0.36	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total HpCDD	<0.36		52	0.36	pg/L		05/11/18 07:00	06/07/18 03:27	1
OCDD	**3.8**	**J**	100	0.054	pg/L		05/11/18 07:00	06/07/18 03:27	1
2,3,7,8-TCDF	<1.3		10	1.3	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total TCDF	<1.3		10	1.3	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,7,8-PeCDF	<0.36		52	0.36	pg/L		05/11/18 07:00	06/07/18 03:27	1
2,3,4,7,8-PeCDF	<0.33		52	0.33	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total PeCDF	<0.36		52	0.36	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,4,7,8-HxCDF	<0.15		52	0.15	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,6,7,8-HxCDF	<0.15		52	0.15	pg/L		05/11/18 07:00	06/07/18 03:27	1
2,3,4,6,7,8-HxCDF	<0.14		52	0.14	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,7,8,9-HxCDF	<0.18		52	0.18	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total HxCDF	<0.18		52	0.18	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,4,6,7,8-HpCDF	<0.12		52	0.12	pg/L		05/11/18 07:00	06/07/18 03:27	1
1,2,3,4,7,8,9-HpCDF	<0.15		52	0.15	pg/L		05/11/18 07:00	06/07/18 03:27	1
Total HpCDF	<0.15		52	0.15	pg/L		05/11/18 07:00	06/07/18 03:27	1
OCDF	<1.6		100	1.6	pg/L		05/11/18 07:00	06/07/18 03:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,7,8-PeCDD	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,4,7,8-HxCDD	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,6,7,8-HxCDD	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-OCDD	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-2,3,7,8-TCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,7,8-PeCDF	*59*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-2,3,4,7,8-PeCDF	*58*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,4,7,8-HxCDF	*60*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,6,7,8-HxCDF	*61*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-2,3,4,6,7,8-HxCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,7,8,9-HxCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*60*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*
13C-OCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 03:27*	*1*

Client Sample ID: SUPE-W-06C-050318

Date Collected: 05/03/18 09:25
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-3

Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.2		9.6	3.2	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total TCDD	<3.2		9.6	3.2	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,7,8-PeCDD	<0.63		48	0.63	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total PeCDD	**1.9**	**J**	48	0.63	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,4,7,8-HxCDD	<0.12		48	0.12	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,6,7,8-HxCDD	<0.14		48	0.14	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,7,8,9-HxCDD	<0.12		48	0.12	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total HxCDD	<0.14		48	0.14	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,4,6,7,8-HpCDD	<0.46		48	0.46	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total HpCDD	<0.46		48	0.46	pg/L		05/11/18 07:00	06/07/18 04:27	1
OCDD	**8.5**	**J**	96	0.18	pg/L		05/11/18 07:00	06/07/18 04:27	1
2,3,7,8-TCDF	<0.82		9.6	0.82	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total TCDF	<0.82		9.6	0.82	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,7,8-PeCDF	<0.045		48	0.045	pg/L		05/11/18 07:00	06/07/18 04:27	1
2,3,4,7,8-PeCDF	<0.039		48	0.039	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total PeCDF	<0.045		48	0.045	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,4,7,8-HxCDF	<0.23		48	0.23	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,6,7,8-HxCDF	<0.24		48	0.24	pg/L		05/11/18 07:00	06/07/18 04:27	1
2,3,4,6,7,8-HxCDF	<0.22		48	0.22	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,7,8,9-HxCDF	<0.26		48	0.26	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total HxCDF	<0.26		48	0.26	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,4,6,7,8-HpCDF	<0.041		48	0.041	pg/L		05/11/18 07:00	06/07/18 04:27	1
1,2,3,4,7,8,9-HpCDF	<0.051		48	0.051	pg/L		05/11/18 07:00	06/07/18 04:27	1
Total HpCDF	<0.051		48	0.051	pg/L		05/11/18 07:00	06/07/18 04:27	1
OCDF	<1.7		96	1.7	pg/L		05/11/18 07:00	06/07/18 04:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,7,8-PeCDD	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,4,7,8-HxCDD	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,6,7,8-HxCDD	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-OCDD	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-2,3,7,8-TCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,7,8-PeCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-2,3,4,7,8-PeCDF	*61*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,4,7,8-HxCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,6,7,8-HxCDF	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-2,3,4,6,7,8-HxCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,7,8,9-HxCDF	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*
13C-OCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 04:27*	*1*

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-12A-050318
Date Collected: 05/03/18 11:55
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-4
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<2.9		9.6	2.9	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total TCDD	<2.9		9.6	2.9	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,7,8-PeCDD	<1.1		48	1.1	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total PeCDD	<1.1		48	1.1	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,4,7,8-HxCDD	<0.55		48	0.55	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,6,7,8-HxCDD	<0.54		48	0.54	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,7,8,9-HxCDD	<0.51		48	0.51	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total HxCDD	<0.55		48	0.55	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,4,6,7,8-HpCDD	**30**	**J**	48	1.4	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total HpCDD	**60**		48	1.4	pg/L		05/11/18 07:00	06/07/18 12:33	1
OCDD	**270**		96	0.48	pg/L		05/11/18 07:00	06/07/18 12:33	1
2,3,7,8-TCDF	<1.1		9.6	1.1	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total TCDF	<1.1		9.6	1.1	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,7,8-PeCDF	<0.59		48	0.59	pg/L		05/11/18 07:00	06/07/18 12:33	1
2,3,4,7,8-PeCDF	<0.56		48	0.56	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total PeCDF	**9.2**	**J**	48	0.58	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,4,7,8-HxCDF	<0.61		48	0.61	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,6,7,8-HxCDF	**2.6**	**J**	48	0.61	pg/L		05/11/18 07:00	06/07/18 12:33	1
2,3,4,6,7,8-HxCDF	<0.58		48	0.58	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,7,8,9-HxCDF	<0.75		48	0.75	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total HxCDF	**22**	**J**	48	0.64	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,4,6,7,8-HpCDF	**8.2**	**J**	48	0.22	pg/L		05/11/18 07:00	06/07/18 12:33	1
1,2,3,4,7,8,9-HpCDF	<0.30		48	0.30	pg/L		05/11/18 07:00	06/07/18 12:33	1
Total HpCDF	**28**	**J**	48	0.26	pg/L		05/11/18 07:00	06/07/18 12:33	1
OCDF	**26**	**J**	96	1.5	pg/L		05/11/18 07:00	06/07/18 12:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*82*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,7,8-PeCDD	*84*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,4,7,8-HxCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,6,7,8-HxCDD	*85*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-OCDD	*77*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-2,3,7,8-TCDF	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,7,8-PeCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-2,3,4,7,8-PeCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,4,7,8-HxCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,6,7,8-HxCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-2,3,4,6,7,8-HxCDF	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,7,8,9-HxCDF	*86*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*77*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*
13C-OCDF	*82*		*40 - 135*	*05/11/18 07:00*	*06/07/18 12:33*	*1*

Client Sample ID: SUPE-W-12CR-050318
Date Collected: 05/03/18 14:07
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-5
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.1		10	3.1	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total TCDD	<3.1		10	3.1	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,7,8-PeCDD	<0.48		50	0.48	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total PeCDD	<0.48		50	0.48	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,4,7,8-HxCDD	<0.064		50	0.064	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,6,7,8-HxCDD	<0.071		50	0.071	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,7,8,9-HxCDD	<0.063		50	0.063	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total HxCDD	<0.071		50	0.071	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,4,6,7,8-HpCDD	<0.69		50	0.69	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total HpCDD	<0.69		50	0.69	pg/L		05/11/18 07:00	06/07/18 13:33	1
OCDD	**31**	**J**	100	0.23	pg/L		05/11/18 07:00	06/07/18 13:33	1
2,3,7,8-TCDF	<1.4		10	1.4	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total TCDF	<1.4		10	1.4	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,7,8-PeCDF	<0.61		50	0.61	pg/L		05/11/18 07:00	06/07/18 13:33	1
2,3,4,7,8-PeCDF	<0.53		50	0.53	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total PeCDF	<0.61		50	0.61	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,4,7,8-HxCDF	<0.22		50	0.22	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,6,7,8-HxCDF	<0.22		50	0.22	pg/L		05/11/18 07:00	06/07/18 13:33	1
2,3,4,6,7,8-HxCDF	<0.21		50	0.21	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,7,8,9-HxCDF	<0.30		50	0.30	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total HxCDF	<0.30		50	0.30	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,4,6,7,8-HpCDF	<0.019		50	0.019	pg/L		05/11/18 07:00	06/07/18 13:33	1
1,2,3,4,7,8,9-HpCDF	<0.026		50	0.026	pg/L		05/11/18 07:00	06/07/18 13:33	1
Total HpCDF	<0.026		50	0.026	pg/L		05/11/18 07:00	06/07/18 13:33	1
OCDF	<2.0		100	2.0	pg/L		05/11/18 07:00	06/07/18 13:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,7,8-PeCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,4,7,8-HxCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-OCDD	*64*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-2,3,7,8-TCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,7,8-PeCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-2,3,4,7,8-PeCDF	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,4,7,8-HxCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,6,7,8-HxCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-2,3,4,6,7,8-HxCDF	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,7,8,9-HxCDF	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*
13C-OCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 13:33*	*1*

Client Sample ID: SUPE-EB-02-050318
Date Collected: 05/03/18 14:42
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-6
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<4.1		10	4.1	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total TCDD	<4.1		10	4.1	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,7,8-PeCDD	<1.1		52	1.1	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total PeCDD	<1.1		52	1.1	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,4,7,8-HxCDD	<0.61		52	0.61	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,6,7,8-HxCDD	<0.70		52	0.70	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,7,8,9-HxCDD	<0.61		52	0.61	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total HxCDD	<0.70		52	0.70	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,4,6,7,8-HpCDD	<0.27		52	0.27	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total HpCDD	<0.27		52	0.27	pg/L		05/11/18 07:00	06/07/18 14:33	1
OCDD	<0.032		100	0.032	pg/L		05/11/18 07:00	06/07/18 14:33	1
2,3,7,8-TCDF	<1.4		10	1.4	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total TCDF	<1.4		10	1.4	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,7,8-PeCDF	<0.90		52	0.90	pg/L		05/11/18 07:00	06/07/18 14:33	1
2,3,4,7,8-PeCDF	<0.82		52	0.82	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total PeCDF	<0.90		52	0.90	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,4,7,8-HxCDF	<0.11		52	0.11	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,6,7,8-HxCDF	<0.11		52	0.11	pg/L		05/11/18 07:00	06/07/18 14:33	1
2,3,4,6,7,8-HxCDF	<0.10		52	0.10	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,7,8,9-HxCDF	<0.13		52	0.13	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total HxCDF	<0.13		52	0.13	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,4,6,7,8-HpCDF	<0.024		52	0.024	pg/L		05/11/18 07:00	06/07/18 14:33	1
1,2,3,4,7,8,9-HpCDF	<0.028		52	0.028	pg/L		05/11/18 07:00	06/07/18 14:33	1
Total HpCDF	<0.028		52	0.028	pg/L		05/11/18 07:00	06/07/18 14:33	1
OCDF	<1.4		100	1.4	pg/L		05/11/18 07:00	06/07/18 14:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,7,8-PeCDD	*68*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,4,7,8-HxCDD	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-OCDD	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-2,3,7,8-TCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,7,8-PeCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-2,3,4,7,8-PeCDF	*61*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,4,7,8-HxCDF	*57*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,6,7,8-HxCDF	*64*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-2,3,4,6,7,8-HxCDF	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,7,8,9-HxCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*63*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*
13C-OCDF	*82*		*40 - 135*	*05/11/18 07:00*	*06/07/18 14:33*	*1*

Client Sample ID: SUPE-W-30A-050318
Date Collected: 05/03/18 15:40
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-7
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<2.3		11	2.3	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total TCDD	<2.3		11	2.3	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,7,8-PeCDD	<0.61		53	0.61	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total PeCDD	<0.61		53	0.61	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,4,7,8-HxCDD	<0.25		53	0.25	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,6,7,8-HxCDD	**11**	**J**	53	0.27	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,7,8,9-HxCDD	<0.24		53	0.24	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total HxCDD	**38**	**J**	53	0.25	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,4,6,7,8-HpCDD	**220**		53	1.9	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total HpCDD	**520**		53	1.9	pg/L		05/11/18 07:00	06/07/18 15:34	1
OCDD	**2800**		110	0.72	pg/L		05/11/18 07:00	06/07/18 15:34	1
2,3,7,8-TCDF	<1.0		11	1.0	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total TCDF	**11**		11	1.0	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,7,8-PeCDF	<0.78		53	0.78	pg/L		05/11/18 07:00	06/07/18 15:34	1
2,3,4,7,8-PeCDF	<0.88		53	0.88	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total PeCDF	**47**	**J**	53	0.83	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,4,7,8-HxCDF	**10**	**J**	53	1.4	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,6,7,8-HxCDF	**11**	**J**	53	1.4	pg/L		05/11/18 07:00	06/07/18 15:34	1
2,3,4,6,7,8-HxCDF	<1.4		53	1.4	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,7,8,9-HxCDF	<1.7		53	1.7	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total HxCDF	**200**		53	1.5	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,4,6,7,8-HpCDF	**82**		53	1.1	pg/L		05/11/18 07:00	06/07/18 15:34	1
1,2,3,4,7,8,9-HpCDF	**9.5**	**J**	53	1.3	pg/L		05/11/18 07:00	06/07/18 15:34	1
Total HpCDF	**310**		53	1.2	pg/L		05/11/18 07:00	06/07/18 15:34	1
OCDF	**240**		110	1.7	pg/L		05/11/18 07:00	06/07/18 15:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*81*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,7,8-PeCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,4,7,8-HxCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-OCDD	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-2,3,7,8-TCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,7,8-PeCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-2,3,4,7,8-PeCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,6,7,8-HxCDF	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-2,3,4,6,7,8-HxCDF	*77*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,7,8,9-HxCDF	*82*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*
13C-OCDF	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 15:34*	*1*

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-30C-050318
Date Collected: 05/02/18 15:52
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-8
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.5		9.5	3.5	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total TCDD	<3.5		9.5	3.5	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,7,8-PeCDD	<1.3		48	1.3	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total PeCDD	<1.3		48	1.3	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,4,7,8-HxCDD	<0.12		48	0.12	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,6,7,8-HxCDD	<0.14		48	0.14	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,7,8,9-HxCDD	<0.12		48	0.12	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total HxCDD	<0.14		48	0.14	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,4,6,7,8-HpCDD	**9.2**	**J**	48	0.23	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total HpCDD	**25**	**J**	48	0.23	pg/L		05/11/18 07:00	06/07/18 16:35	1
OCDD	**190**		95	0.72	pg/L		05/11/18 07:00	06/07/18 16:35	1
2,3,7,8-TCDF	<1.1		9.5	1.1	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total TCDF	<1.1		9.5	1.1	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,7,8-PeCDF	<0.53		48	0.53	pg/L		05/11/18 07:00	06/07/18 16:35	1
2,3,4,7,8-PeCDF	<0.48		48	0.48	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total PeCDF	<0.53		48	0.53	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,4,7,8-HxCDF	<0.20		48	0.20	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,6,7,8-HxCDF	<0.20		48	0.20	pg/L		05/11/18 07:00	06/07/18 16:35	1
2,3,4,6,7,8-HxCDF	<0.20		48	0.20	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,7,8,9-HxCDF	<0.25		48	0.25	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total HxCDF	<0.25		48	0.25	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,4,6,7,8-HpCDF	<0.12		48	0.12	pg/L		05/11/18 07:00	06/07/18 16:35	1
1,2,3,4,7,8,9-HpCDF	<0.15		48	0.15	pg/L		05/11/18 07:00	06/07/18 16:35	1
Total HpCDF	**5.5**	**J**	48	0.14	pg/L		05/11/18 07:00	06/07/18 16:35	1
OCDF	**18**	**J**	95	2.1	pg/L		05/11/18 07:00	06/07/18 16:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,7,8-PeCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,4,7,8-HxCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-OCDD	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-2,3,7,8-TCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,7,8-PeCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-2,3,4,7,8-PeCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,4,7,8-HxCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,6,7,8-HxCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-2,3,4,6,7,8-HxCDF	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,7,8,9-HxCDF	*79*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*63*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*
13C-OCDF	*64*		*40 - 135*	*05/11/18 07:00*	*06/07/18 16:35*	*1*

Client Sample ID: SUPE-W-99-050318
Date Collected: 05/03/18 01:01
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-9
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.0		9.9	3.0	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total TCDD	<3.0		9.9	3.0	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,7,8-PeCDD	<0.89		49	0.89	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total PeCDD	<0.89		49	0.89	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,4,7,8-HxCDD	<0.23		49	0.23	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,6,7,8-HxCDD	<0.25		49	0.25	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,7,8,9-HxCDD	<0.22		49	0.22	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total HxCDD	<0.25		49	0.25	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,4,6,7,8-HpCDD	**2.7**	**J**	49	0.52	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total HpCDD	**11**	**J**	49	0.52	pg/L		05/11/18 07:00	06/07/18 17:35	1
OCDD	**41**	**J**	99	0.17	pg/L		05/11/18 07:00	06/07/18 17:35	1
2,3,7,8-TCDF	<0.76		9.9	0.76	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total TCDF	<0.76		9.9	0.76	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,7,8-PeCDF	<0.43		49	0.43	pg/L		05/11/18 07:00	06/07/18 17:35	1
2,3,4,7,8-PeCDF	<0.38		49	0.38	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total PeCDF	<0.43		49	0.43	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,4,7,8-HxCDF	<0.020		49	0.020	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,6,7,8-HxCDF	<0.022		49	0.022	pg/L		05/11/18 07:00	06/07/18 17:35	1
2,3,4,6,7,8-HxCDF	<0.021		49	0.021	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,7,8,9-HxCDF	<0.025		49	0.025	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total HxCDF	<0.025		49	0.025	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,4,6,7,8-HpCDF	<0.068		49	0.068	pg/L		05/11/18 07:00	06/07/18 17:35	1
1,2,3,4,7,8,9-HpCDF	<0.078		49	0.078	pg/L		05/11/18 07:00	06/07/18 17:35	1
Total HpCDF	<0.078		49	0.078	pg/L		05/11/18 07:00	06/07/18 17:35	1
OCDF	<2.2		99	2.2	pg/L		05/11/18 07:00	06/07/18 17:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,7,8-PeCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,4,7,8-HxCDD	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-OCDD	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-2,3,7,8-TCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,7,8-PeCDF	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-2,3,4,7,8-PeCDF	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,4,7,8-HxCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,6,7,8-HxCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-2,3,4,6,7,8-HxCDF	*76*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,7,8,9-HxCDF	*86*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*
13C-OCDF	*78*		*40 - 135*	*05/11/18 07:00*	*06/07/18 17:35*	*1*

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-28C-050318
Date Collected: 05/03/18 11:13
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-10
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<2.5		9.6	2.5	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total TCDD	<2.5		9.6	2.5	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,7,8-PeCDD	<0.87		48	0.87	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total PeCDD	<0.87		48	0.87	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,4,7,8-HxCDD	<0.18		48	0.18	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,6,7,8-HxCDD	<0.19		48	0.19	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,7,8,9-HxCDD	<0.17		48	0.17	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total HxCDD	**1.9**	**J**	48	0.18	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,4,6,7,8-HpCDD	**7.9**	**J**	48	0.43	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total HpCDD	**28**	**J**	48	0.43	pg/L		05/11/18 07:00	06/08/18 03:14	1
OCDD	**80**	**J**	96	0.73	pg/L		05/11/18 07:00	06/08/18 03:14	1
2,3,7,8-TCDF	<0.93		9.6	0.93	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total TCDF	<0.93		9.6	0.93	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,7,8-PeCDF	<0.39		48	0.39	pg/L		05/11/18 07:00	06/08/18 03:14	1
2,3,4,7,8-PeCDF	<0.41		48	0.41	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total PeCDF	<0.41		48	0.41	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,4,7,8-HxCDF	<0.13		48	0.13	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,6,7,8-HxCDF	<0.14		48	0.14	pg/L		05/11/18 07:00	06/08/18 03:14	1
2,3,4,6,7,8-HxCDF	<0.13		48	0.13	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,7,8,9-HxCDF	<0.15		48	0.15	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total HxCDF	**0.91**	**J**	48	0.13	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,4,6,7,8-HpCDF	**5.8**	**J**	48	0.21	pg/L		05/11/18 07:00	06/08/18 03:14	1
1,2,3,4,7,8,9-HpCDF	<0.31		48	0.31	pg/L		05/11/18 07:00	06/08/18 03:14	1
Total HpCDF	**11**	**J**	48	0.26	pg/L		05/11/18 07:00	06/08/18 03:14	1
OCDF	**13**	**J**	96	2.0	pg/L		05/11/18 07:00	06/08/18 03:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,7,8-PeCDD	*74*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,4,7,8-HxCDD	*80*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,6,7,8-HxCDD	*84*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*76*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-OCDD	*69*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-2,3,7,8-TCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,7,8-PeCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-2,3,4,7,8-PeCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,4,7,8-HxCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,6,7,8-HxCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-2,3,4,6,7,8-HxCDF	*76*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,7,8,9-HxCDF	*82*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*
13C-OCDF	*75*		*40 - 135*	*05/11/18 07:00*	*06/08/18 03:14*	*1*

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-10AR2-050318
Date Collected: 05/03/18 15:54
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-11
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<2.1		9.5	2.1	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total TCDD	<2.1		9.5	2.1	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,7,8-PeCDD	<0.55		48	0.55	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total PeCDD	<0.55		48	0.55	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,4,7,8-HxCDD	<0.21		48	0.21	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,6,7,8-HxCDD	<0.25		48	0.25	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,7,8,9-HxCDD	<0.21		48	0.21	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total HxCDD	<0.25		48	0.25	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,4,6,7,8-HpCDD	**11**	**J**	48	0.74	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total HpCDD	**44**	**J**	48	0.74	pg/L		05/11/18 07:00	06/08/18 04:14	1
OCDD	**110**		95	0.21	pg/L		05/11/18 07:00	06/08/18 04:14	1
2,3,7,8-TCDF	<0.79		9.5	0.79	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total TCDF	<0.79		9.5	0.79	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,7,8-PeCDF	<0.20		48	0.20	pg/L		05/11/18 07:00	06/08/18 04:14	1
2,3,4,7,8-PeCDF	<0.21		48	0.21	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total PeCDF	<0.21		48	0.21	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,4,7,8-HxCDF	<0.077		48	0.077	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,6,7,8-HxCDF	<0.075		48	0.075	pg/L		05/11/18 07:00	06/08/18 04:14	1
2,3,4,6,7,8-HxCDF	<0.068		48	0.068	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,7,8,9-HxCDF	<0.084		48	0.084	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total HxCDF	**1.7**	**J**	48	0.076	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,4,6,7,8-HpCDF	<0.033		48	0.033	pg/L		05/11/18 07:00	06/08/18 04:14	1
1,2,3,4,7,8,9-HpCDF	<0.045		48	0.045	pg/L		05/11/18 07:00	06/08/18 04:14	1
Total HpCDF	**7.3**	**J**	48	0.039	pg/L		05/11/18 07:00	06/08/18 04:14	1
OCDF	**8.9**	**J**	95	1.0	pg/L		05/11/18 07:00	06/08/18 04:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*83*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,7,8-PeCDD	*84*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,4,7,8-HxCDD	*81*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-OCDD	*63*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-2,3,7,8-TCDF	*78*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-2,3,4,7,8-PeCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,4,7,8-HxCDF	*69*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,6,7,8-HxCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-2,3,4,6,7,8-HxCDF	*81*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,7,8,9-HxCDF	*87*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*72*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*
13C-OCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/08/18 04:14*	*1*

Client Sample ID: SUPE-W-04AR2-050318
Date Collected: 05/03/18 13:28
Date Received: 05/05/18 09:00

Lab Sample ID: 480-135500-12
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<0.51		9.9	0.51	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total TCDD	<0.51		9.9	0.51	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,7,8-PeCDD	**0.63**	**J**	50	0.10	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total PeCDD	**0.63**	**J**	50	0.10	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,4,7,8-HxCDD	**2.0**	**J**	50	0.11	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,6,7,8-HxCDD	**4.9**	**J**	50	0.13	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,7,8,9-HxCDD	**3.2**	**J**	50	0.11	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total HxCDD	**34**	**J**	50	0.12	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,4,6,7,8-HpCDD	**160**		50	0.41	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total HpCDD	**390**		50	0.41	pg/L		05/11/18 07:00	06/08/18 05:15	1
OCDD	**1300**		99	0.20	pg/L		05/11/18 07:00	06/08/18 05:15	1
2,3,7,8-TCDF	<0.14		9.9	0.14	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total TCDF	**1.9**	**J**	9.9	0.14	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,7,8-PeCDF	<0.17		50	0.17	pg/L		05/11/18 07:00	06/08/18 05:15	1
2,3,4,7,8-PeCDF	<0.17		50	0.17	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total PeCDF	**6.9**	**J**	50	0.17	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,4,7,8-HxCDF	**3.2**	**J**	50	0.33	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,6,7,8-HxCDF	**2.7**	**J**	50	0.32	pg/L		05/11/18 07:00	06/08/18 05:15	1
2,3,4,6,7,8-HxCDF	**1.0**	**J**	50	0.30	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,7,8,9-HxCDF	<0.36		50	0.36	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total HxCDF	**61**		50	0.32	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,4,6,7,8-HpCDF	**37**	**J**	50	0.17	pg/L		05/11/18 07:00	06/08/18 05:15	1
1,2,3,4,7,8,9-HpCDF	**2.3**	**J**	50	0.21	pg/L		05/11/18 07:00	06/08/18 05:15	1
Total HpCDF	**140**		50	0.19	pg/L		05/11/18 07:00	06/08/18 05:15	1
OCDF	**100**		99	0.37	pg/L		05/11/18 07:00	06/08/18 05:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*82*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,7,8-PeCDD	*85*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,4,7,8-HxCDD	*73*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,6,7,8-HxCDD	*71*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-OCDD	*90*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-2,3,7,8-TCDF	*77*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-2,3,4,7,8-PeCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,4,7,8-HxCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,6,7,8-HxCDF	*64*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-2,3,4,6,7,8-HxCDF	*70*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,7,8,9-HxCDF	*77*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*61*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*75*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*
13C-OCDF	*96*		*40 - 135*	*05/11/18 07:00*	*06/08/18 05:15*	*1*

Isotope Dilution Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	PeCDD (40-135)	HxCDD (40-135)	HxDD (40-135)	HpCDD (40-135)	OCDD (40-135)	TCDF (40-135)	PeCDF (40-135)
480-135500-1	SUPE-W-06A-050218	75	76	78	76	72	63	72	69
480-135500-2	SUPE-EB-01-050218	66	67	67	68	70	65	65	59
480-135500-3	SUPE-W-06C-050318	68	67	71	75	72	73	66	62
480-135500-3 MS	SUPE-W-06C-050318	75	74	71	74	74	69	69	69
480-135500-3 MSD	SUPE-W-06C-050318	64	65	66	69	70	72	63	60
480-135500-4	SUPE-W-12A-050318	82	84	76	85	85	77	75	73
480-135500-5	SUPE-W-12CR-050318	74	76	76	79	70	64	69	67
480-135500-6	SUPE-EB-02-050318	69	68	66	74	75	72	65	62
480-135500-7	SUPE-W-30A-050318	81	78	78	81	73	74	72	74
480-135500-8	SUPE-W-30C-050318	76	76	78	79	70	62	72	69
480-135500-9	SUPE-W-99-050318	77	78	73	83	78	72	72	71
480-135500-10	SUPE-W-28C-050318	77	74	80	84	76	69	72	70
480-135500-11	SUPE-W-10AR2-050318	83	84	81	81	74	63	78	76
480-135500-12	SUPE-W-04AR2-050318	82	85	73	71	77	90	77	79
LCS 140-20259/16-A	Lab Control Sample	71	77	71	73	79	81	66	69
MB 140-20259/15-A	Method Blank	70	69	71	71	75	69	65	61

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PeCF (40-135)	HxCDF (40-135)	HxDF (40-135)	13CHxCF (40-135)	HxCF (40-135)	HpCDF (40-135)	HpCDF2 (40-135)	13C-OCDF (40-135)
480-135500-1	SUPE-W-06A-050218	67	67	74	74	82	62	67	73
480-135500-2	SUPE-EB-01-050218	58	60	61	66	69	60	67	69
480-135500-3	SUPE-W-06C-050318	61	62	68	70	79	65	68	74
480-135500-3 MS	SUPE-W-06C-050318	69	62	67	69	78	64	68	78
480-135500-3 MSD	SUPE-W-06C-050318	58	53	54	64	70	56	66	80
480-135500-4	SUPE-W-12A-050318	70	65	72	76	86	70	77	82
480-135500-5	SUPE-W-12CR-050318	68	66	73	76	79	62	65	69
480-135500-6	SUPE-EB-02-050318	61	57	64	71	73	63	72	82
480-135500-7	SUPE-W-30A-050318	70	71	75	77	82	67	72	79
480-135500-8	SUPE-W-30C-050318	65	67	74	75	79	63	66	64
480-135500-9	SUPE-W-99-050318	71	66	73	76	86	65	74	78
480-135500-10	SUPE-W-28C-050318	69	70	73	76	82	70	73	75
480-135500-11	SUPE-W-10AR2-050318	70	69	74	81	87	67	72	66
480-135500-12	SUPE-W-04AR2-050318	74	62	64	70	77	61	75	96
LCS 140-20259/16-A	Lab Control Sample	66	58	60	69	73	61	74	87
MB 140-20259/15-A	Method Blank	62	59	64	67	73	60	66	74

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
PeCDD = 13C-1,2,3,7,8-PeCDD
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxDD = 13C-1,2,3,6,7,8-HxCDD
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
OCDD = 13C-OCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDF = 13C-1,2,3,7,8-PeCDF
PeCF = 13C-2,3,4,7,8-PeCDF
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HxDF = 13C-1,2,3,6,7,8-HxCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF

HxCF = 13C-1,2,3,7,8,9-HxCDF
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
13C-OCDF = 13C-OCDF

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 140-20259/15-A
Matrix: Water
Analysis Batch: 20955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20259

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	<3.7		10	3.7	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total TCDD	<3.7		10	3.7	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,7,8-PeCDD	<1.4		50	1.4	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total PeCDD	<1.4		50	1.4	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,4,7,8-HxCDD	<0.45		50	0.45	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,6,7,8-HxCDD	<0.54		50	0.54	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,7,8,9-HxCDD	<0.45		50	0.45	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total HxCDD	<0.54		50	0.54	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,4,6,7,8-HpCDD	<0.36		50	0.36	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total HpCDD	<0.36		50	0.36	pg/L		05/11/18 07:00	06/07/18 01:27	1
OCDD	<0.070		100	0.070	pg/L		05/11/18 07:00	06/07/18 01:27	1
2,3,7,8-TCDF	<1.5		10	1.5	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total TCDF	<1.5		10	1.5	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,7,8-PeCDF	<1.8		50	1.8	pg/L		05/11/18 07:00	06/07/18 01:27	1
2,3,4,7,8-PeCDF	<1.5		50	1.5	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total PeCDF	<1.8		50	1.8	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,4,7,8-HxCDF	<0.75		50	0.75	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,6,7,8-HxCDF	<0.74		50	0.74	pg/L		05/11/18 07:00	06/07/18 01:27	1
2,3,4,6,7,8-HxCDF	<0.73		50	0.73	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,7,8,9-HxCDF	<0.85		50	0.85	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total HxCDF	<0.85		50	0.85	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,4,6,7,8-HpCDF	<0.11		50	0.11	pg/L		05/11/18 07:00	06/07/18 01:27	1
1,2,3,4,7,8,9-HpCDF	<0.16		50	0.16	pg/L		05/11/18 07:00	06/07/18 01:27	1
Total HpCDF	<0.16		50	0.16	pg/L		05/11/18 07:00	06/07/18 01:27	1
OCDF	<1.9		100	1.9	pg/L		05/11/18 07:00	06/07/18 01:27	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*70*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,7,8-PeCDD	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,4,7,8-HxCDD	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,6,7,8-HxCDD	*71*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*75*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-OCDD	*69*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-2,3,7,8-TCDF	*65*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,7,8-PeCDF	*61*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-2,3,4,7,8-PeCDF	*62*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,4,7,8-HxCDF	*59*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,6,7,8-HxCDF	*64*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-2,3,4,6,7,8-HxCDF	*67*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,7,8,9-HxCDF	*73*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*60*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*66*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*
13C-OCDF	*74*		*40 - 135*	*05/11/18 07:00*	*06/07/18 01:27*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-20259/16-A
Matrix: Water
Analysis Batch: 20955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	193		pg/L		96	77 - 127
1,2,3,7,8-PeCDD	1000	921		pg/L		92	78 - 128
1,2,3,4,7,8-HxCDD	1000	940		pg/L		94	73 - 123
1,2,3,6,7,8-HxCDD	1000	896		pg/L		90	72 - 127
1,2,3,7,8,9-HxCDD	1000	1010		pg/L		101	76 - 126
1,2,3,4,6,7,8-HpCDD	1000	891		pg/L		89	73 - 123
OCDD	2000	1760		pg/L		88	75 - 125
2,3,7,8-TCDF	200	189		pg/L		94	74 - 124
1,2,3,7,8-PeCDF	1000	872		pg/L		87	74 - 124
2,3,4,7,8-PeCDF	1000	963		pg/L		96	74 - 124
1,2,3,4,7,8-HxCDF	1000	890		pg/L		89	75 - 125
1,2,3,6,7,8-HxCDF	1000	896		pg/L		90	75 - 125
2,3,4,6,7,8-HxCDF	1000	928		pg/L		93	76 - 126
1,2,3,7,8,9-HxCDF	1000	910		pg/L		91	76 - 126
1,2,3,4,6,7,8-HpCDF	1000	973		pg/L		97	71 - 121
1,2,3,4,7,8,9-HpCDF	1000	909		pg/L		91	73 - 123
OCDF	2000	1670		pg/L		83	68 - 132

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*71*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*77*		*40 - 135*
13C-1,2,3,4,7,8-HxCDD	*71*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*73*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*
13C-OCDD	*81*		*40 - 135*
13C-2,3,7,8-TCDF	*66*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*69*		*40 - 135*
13C-2,3,4,7,8-PeCDF	*66*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*58*		*40 - 135*
13C-1,2,3,6,7,8-HxCDF	*60*		*40 - 135*
13C-2,3,4,6,7,8-HxCDF	*69*		*40 - 135*
13C-1,2,3,7,8,9-HxCDF	*73*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*61*		*40 - 135*
13C-1,2,3,4,7,8,9-HpCDF	*74*		*40 - 135*
13C-OCDF	*87*		*40 - 135*

Lab Sample ID: 480-135500-3 MS
Matrix: Water
Analysis Batch: 20955

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 20259

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	<3.2		197	197		pg/L		100	77 - 127
1,2,3,7,8-PeCDD	<0.63		983	1040		pg/L		105	78 - 128
1,2,3,4,7,8-HxCDD	<0.12		983	973		pg/L		99	73 - 123
1,2,3,6,7,8-HxCDD	<0.14		983	933		pg/L		95	72 - 127
1,2,3,7,8,9-HxCDD	<0.12		983	1030		pg/L		105	76 - 126
1,2,3,4,6,7,8-HpCDD	<0.46		983	865		pg/L		88	73 - 123
OCDD	8.5	J	1970	1760		pg/L		89	75 - 125

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: 480-135500-3 MS
Matrix: Water
Analysis Batch: 20955

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 20259

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDF	<0.82		197	212		pg/L		108	74 - 124
1,2,3,7,8-PeCDF	<0.045		983	920		pg/L		94	74 - 124
2,3,4,7,8-PeCDF	<0.039		983	927		pg/L		94	74 - 124
1,2,3,4,7,8-HxCDF	<0.23		983	989		pg/L		101	75 - 125
1,2,3,6,7,8-HxCDF	<0.24		983	964		pg/L		98	75 - 125
2,3,4,6,7,8-HxCDF	<0.22		983	964		pg/L		98	76 - 126
1,2,3,7,8,9-HxCDF	<0.26		983	890		pg/L		91	76 - 126
1,2,3,4,6,7,8-HpCDF	<0.041		983	956		pg/L		97	71 - 121
1,2,3,4,7,8,9-HpCDF	<0.051		983	929		pg/L		95	73 - 123
OCDF	<1.7		1970	1500		pg/L		77	49 - 134

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*74*		*40 - 135*
13C-1,2,3,4,7,8-HxCDD	*71*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*
13C-OCDD	*69*		*40 - 135*
13C-2,3,7,8-TCDF	*69*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*69*		*40 - 135*
13C-2,3,4,7,8-PeCDF	*69*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*62*		*40 - 135*
13C-1,2,3,6,7,8-HxCDF	*67*		*40 - 135*
13C-2,3,4,6,7,8-HxCDF	*69*		*40 - 135*
13C-1,2,3,7,8,9-HxCDF	*78*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*64*		*40 - 135*
13C-1,2,3,4,7,8,9-HpCDF	*68*		*40 - 135*
13C-OCDF	*78*		*40 - 135*

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 20955

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 20259

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD	<3.2		191	162	F2	pg/L		85	77 - 127	19	15
1,2,3,7,8-PeCDD	<0.63		954	981		pg/L		103	78 - 128	5	15
1,2,3,4,7,8-HxCDD	<0.12		954	968		pg/L		102	73 - 123	1	15
1,2,3,6,7,8-HxCDD	<0.14		954	952		pg/L		100	72 - 127	2	15
1,2,3,7,8,9-HxCDD	<0.12		954	965		pg/L		101	76 - 126	6	15
1,2,3,4,6,7,8-HpCDD	<0.46		954	890		pg/L		93	73 - 123	3	15
OCDD	8.5	J	1910	1770		pg/L		92	75 - 125	0	15
2,3,7,8-TCDF	<0.82		191	199		pg/L		104	74 - 124	6	15
1,2,3,7,8-PeCDF	<0.045		954	885		pg/L		93	74 - 124	4	15
2,3,4,7,8-PeCDF	<0.039		954	932		pg/L		98	74 - 124	1	15
1,2,3,4,7,8-HxCDF	<0.23		954	981		pg/L		103	75 - 125	1	15
1,2,3,6,7,8-HxCDF	<0.24		954	988		pg/L		104	75 - 125	3	15
2,3,4,6,7,8-HxCDF	<0.22		954	925		pg/L		97	76 - 126	4	15
1,2,3,7,8,9-HxCDF	<0.26		954	890		pg/L		93	76 - 126	0	15

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: 480-135500-3 MSD
Matrix: Water
Analysis Batch: 20955

Client Sample ID: SUPE-W-06C-050318
Prep Type: Total/NA
Prep Batch: 20259

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HpCDF	<0.041		954	1010		pg/L		106	71 - 121	5	15
1,2,3,4,7,8,9-HpCDF	<0.051		954	905		pg/L		95	73 - 123	3	15
OCDF	<1.7		1910	1580		pg/L		83	49 - 134	5	15

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*64*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*65*		*40 - 135*
13C-1,2,3,4,7,8-HxCDD	*66*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*69*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*70*		*40 - 135*
13C-OCDD	*72*		*40 - 135*
13C-2,3,7,8-TCDF	*63*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*60*		*40 - 135*
13C-2,3,4,7,8-PeCDF	*58*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*53*		*40 - 135*
13C-1,2,3,6,7,8-HxCDF	*54*		*40 - 135*
13C-2,3,4,6,7,8-HxCDF	*64*		*40 - 135*
13C-1,2,3,7,8,9-HxCDF	*70*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*56*		*40 - 135*
13C-1,2,3,4,7,8,9-HpCDF	*66*		*40 - 135*
13C-OCDF	*80*		*40 - 135*

Specialty Organics

Prep Batch: 20259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	8290	
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	8290	
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	8290	
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	8290	
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	8290	
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	8290	
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	8290	
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	8290	
480-135500-9	SUPE-W-99-050318	Total/NA	Water	8290	
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	8290	
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	8290	
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	8290	
MB 140-20259/15-A	Method Blank	Total/NA	Water	8290	
LCS 140-20259/16-A	Lab Control Sample	Total/NA	Water	8290	
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	8290	
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	8290	

Analysis Batch: 20955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-1	SUPE-W-06A-050218	Total/NA	Water	8290A	20259
480-135500-2	SUPE-EB-01-050218	Total/NA	Water	8290A	20259
480-135500-3	SUPE-W-06C-050318	Total/NA	Water	8290A	20259
MB 140-20259/15-A	Method Blank	Total/NA	Water	8290A	20259
LCS 140-20259/16-A	Lab Control Sample	Total/NA	Water	8290A	20259
480-135500-3 MS	SUPE-W-06C-050318	Total/NA	Water	8290A	20259
480-135500-3 MSD	SUPE-W-06C-050318	Total/NA	Water	8290A	20259

Analysis Batch: 20998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-4	SUPE-W-12A-050318	Total/NA	Water	8290A	20259
480-135500-5	SUPE-W-12CR-050318	Total/NA	Water	8290A	20259
480-135500-6	SUPE-EB-02-050318	Total/NA	Water	8290A	20259
480-135500-7	SUPE-W-30A-050318	Total/NA	Water	8290A	20259
480-135500-8	SUPE-W-30C-050318	Total/NA	Water	8290A	20259
480-135500-9	SUPE-W-99-050318	Total/NA	Water	8290A	20259

Analysis Batch: 21023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135500-10	SUPE-W-28C-050318	Total/NA	Water	8290A	20259
480-135500-11	SUPE-W-10AR2-050318	Total/NA	Water	8290A	20259
480-135500-12	SUPE-W-04AR2-050318	Total/NA	Water	8290A	20259

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Client Sample ID: SUPE-W-06A-050218
Lab Sample ID: 480-135500-1
Date Collected: 05/02/18 15:44
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20955	06/07/18 02:27	LKM	TAL KNX

Client Sample ID: SUPE-EB-01-050218
Lab Sample ID: 480-135500-2
Date Collected: 05/02/18 17:15
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20955	06/07/18 03:27	LKM	TAL KNX

Client Sample ID: SUPE-W-06C-050318
Lab Sample ID: 480-135500-3
Date Collected: 05/03/18 09:25
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20955	06/07/18 04:27	LKM	TAL KNX

Client Sample ID: SUPE-W-12A-050318
Lab Sample ID: 480-135500-4
Date Collected: 05/03/18 11:55
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 12:33	KBL	TAL KNX

Client Sample ID: SUPE-W-12CR-050318
Lab Sample ID: 480-135500-5
Date Collected: 05/03/18 14:07
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 13:33	KBL	TAL KNX

Client Sample ID: SUPE-EB-02-050318
Lab Sample ID: 480-135500-6
Date Collected: 05/03/18 14:42
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 14:33	KBL	TAL KNX

Client Sample ID: SUPE-W-30A-050318
Lab Sample ID: 480-135500-7
Date Collected: 05/03/18 15:40
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 15:34	KBL	TAL KNX

Client Sample ID: SUPE-W-30C-050318
Lab Sample ID: 480-135500-8
Date Collected: 05/02/18 15:52
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 16:35	KBL	TAL KNX

Client Sample ID: SUPE-W-99-050318
Lab Sample ID: 480-135500-9
Date Collected: 05/03/18 01:01
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	20998	06/07/18 17:35	KBL	TAL KNX

Client Sample ID: SUPE-W-28C-050318
Lab Sample ID: 480-135500-10
Date Collected: 05/03/18 11:13
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	21023	06/08/18 03:14	LKM	TAL KNX

Client Sample ID: SUPE-W-10AR2-050318
Lab Sample ID: 480-135500-11
Date Collected: 05/03/18 15:54
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	21023	06/08/18 04:14	LKM	TAL KNX

Client Sample ID: SUPE-W-04AR2-050318
Lab Sample ID: 480-135500-12
Date Collected: 05/03/18 13:28
Matrix: Water
Date Received: 05/05/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			20259	05/11/18 07:00	SSS	TAL KNX
Total/NA	Analysis	8290A		1	21023	06/08/18 05:15	LKM	TAL KNX

Lab Chronicle

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998310390	08-31-18

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998044300	08-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8290A	8290	Water	1,2,3,4,6,7,8-HpCDD
8290A	8290	Water	1,2,3,4,6,7,8-HpCDF
8290A	8290	Water	1,2,3,4,7,8,9-HpCDF
8290A	8290	Water	1,2,3,4,7,8-HxCDD
8290A	8290	Water	1,2,3,4,7,8-HxCDF
8290A	8290	Water	1,2,3,6,7,8-HxCDD
8290A	8290	Water	1,2,3,6,7,8-HxCDF
8290A	8290	Water	1,2,3,7,8,9-HxCDD
8290A	8290	Water	1,2,3,7,8,9-HxCDF
8290A	8290	Water	1,2,3,7,8-PeCDD
8290A	8290	Water	1,2,3,7,8-PeCDF
8290A	8290	Water	2,3,4,6,7,8-HxCDF
8290A	8290	Water	2,3,4,7,8-PeCDF
8290A	8290	Water	2,3,7,8-TCDD
8290A	8290	Water	2,3,7,8-TCDF
8290A	8290	Water	OCDD
8290A	8290	Water	OCDF
8290A	8290	Water	Total HpCDD
8290A	8290	Water	Total HpCDF
8290A	8290	Water	Total HxCDD
8290A	8290	Water	Total HxCDF
8290A	8290	Water	Total PeCDD
8290A	8290	Water	Total PeCDF
8290A	8290	Water	Total TCDD
8290A	8290	Water	Total TCDF

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	04-30-19
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-19
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-19
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-19

Accreditation/Certification Summary

Client: Field & Technical Services LLC
TestAmerica Job ID: 480-135500-2
Project/Site: Superior, WI Semiannual Groundwater

Laboratory: TestAmerica Pittsburgh (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
North Carolina (WW/SW)	State Program	4	434	12-31-18
Oregon	NELAP Secondary AB	10	PA-2151	01-28-19
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-18 *
Texas	NELAP	6	T104704528-15-2	03-31-19
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18 *
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-19
Wisconsin	State Program	5	998027800	08-31-18

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

Method Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL KNX
8290	Separatory Funnel (Liquid-Liquid) Extraction of Dioxins and Furans	SW846	TAL KNX

Protocol References:

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

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Field & Technical Services LLC
Project/Site: Superior, WI Semiannual Groundwater

TestAmerica Job ID: 480-135500-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-135500-1	SUPE-W-06A-050218	Water	05/02/18 15:44	05/05/18 09:00
480-135500-2	SUPE-EB-01-050218	Water	05/02/18 17:15	05/05/18 09:00
480-135500-3	SUPE-W-06C-050318	Water	05/03/18 09:25	05/05/18 09:00
480-135500-4	SUPE-W-12A-050318	Water	05/03/18 11:55	05/05/18 09:00
480-135500-5	SUPE-W-12CR-050318	Water	05/03/18 14:07	05/05/18 09:00
480-135500-6	SUPE-EB-02-050318	Water	05/03/18 14:42	05/05/18 09:00
480-135500-7	SUPE-W-30A-050318	Water	05/03/18 15:40	05/05/18 09:00
480-135500-8	SUPE-W-30C-050318	Water	05/02/18 15:52	05/05/18 09:00
480-135500-9	SUPE-W-99-050318	Water	05/03/18 01:01	05/05/18 09:00
480-135500-10	SUPE-W-28C-050318	Water	05/03/18 11:13	05/05/18 09:00
480-135500-11	SUPE-W-10AR2-050318	Water	05/03/18 15:54	05/05/18 09:00
480-135500-12	SUPE-W-04AR2-050318	Water	05/03/18 13:28	05/05/18 09:00

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.#
*500

480-135500 COC

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@fts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)														Notes:
				Preservative	None														
				Total Bottle Count															
05/02/2018	1552	GW	SUPE-W-30C-050218	3	3														

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name:	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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6/11/2018

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500784

500784

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans														
				Preservative	None														
				Total Bottle Count															Notes:
05/02/2018	1552	GW	SUPE-W-30C-050218	2	2														

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	[ ] Rush
Printed Name: Ben Trask	Printed Name: Nikolb	Printed Name:	Printed Name:	[X] Standard
Firm: FTS	Firm: TA	Firm:	Firm:	
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500677

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC+naphtha	8270C_SVOC (less naphtha)															Notes:
				Preservative	None	None															
				Total Bottle Count																	
05/03/2018	0101	GW	SUPE-W-99-050318	3	0	3															
05/03/2018	0929	GW	SUPE-W-18D-050318	3	3	0															
05/03/2018	1113	GW	SUPE-W-28C-050318	3	0	3															
05/03/2018	1554	GW	SUPE-W-10AR2-050318	3	0	3															
5/3/2018	1828	GW	SUPE-W-04AR2 050318	3	0	3															

3.3
Temp 3.6#/ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name:	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500679

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans																	Notes:
				Preservative	None																	
				Total Bottle Count																		
05/03/2018	0101	GW	SUPE-W-99-050318	2	2	0																
05/03/2018	1113	GW	SUPE-W-28C-050318	2	2	0																
05/03/2018	1554	GW	SUPE-W-10AR2-050318	2	2	0																
5/3/18	1328	GW	SUPE-W-04AR2 050318	2	2	0																

3.3
Temp 3.6 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Brendan Rick	Signature: Chuck Kow	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Chuck Kow	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 5/5/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500678

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAPIT
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (412) 680-4312
brick.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha																	Notes:
				Preservative	HCL																	
				Total Bottle Count																		
05/03/2018	0000	GW	SUPE-TB-02-050318	2	2	0																
05/03/2018	0101	GW	SUPE-W-99-050318	3	3	0																
05/03/2018	1113	GW	SUPE-W-28C-050318	3	3	0																
05/03/2018	1554	GW	SUPE-W-10AR2-050318	3	3	0																
5/3/18	1328	GW	SUPE-W-04AR2-050318	3	3	0																

3.3
Temp 3.6 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Brendan Rick	Signature: Chris Kow	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Chris Kow	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm	☒ Standard
Date/Time: 05/03/2018 1753	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500785

500785

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0553-18
Laboratory: TAPIT
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (724) 858-5953
btrask.2006@fts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha													Notes:
				Preservative	HCL													
				Total Bottle Count														
05/02/2018	0000	GW	SUPE-TB-01-050218	2	2													
05/02/2018	1552	GW	SUPE-W-30C-050218	3	3													

Temp 2.7 #ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Nikolo	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1821	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500672

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0553-18
Laboratory: TAPIT
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (412) 680-4312
brick.2003@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha													Notes:
				Preservative	HCL													
				Total Bottle Count														
05/02/2018	1544	GW	SUPE-W-06A-050218	3	3													
05/02/2018	1715	GW	SUPE-EB-01-050218	3	3													

2.9
Temp 2.7 #(ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Likolb	Printed Name:	Printed Name:	☒ Standard
Firm: FTS	Firm: TA	Firm:	Firm:	
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500673

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method: FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact (412) 680-4312
brick.2003@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)													Notes:
				Preservative	None													
				Total Bottle Count														
05/02/2018	1544	GW	SUPE-W-08A-050218	3	3													
05/02/2018	1715	GW	SUPE-EB-01-050218	3	3													

2,7
Temp 2,7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: [signature]	Signature: [signature]	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: LiKolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500671

Project Name:	Superior 2018 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-18	Address:	200 Third Avenue	Contact	(412) 680-4312
Laboratory:	TAKNOX		Carnegie, PA 15106		brick.2003@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2018 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans														Notes:
				Preservative	None														
				Total Bottle Count															
05/02/2018	1544	GW	SUPE-W-06A-050218	2	2														
05/02/2018	1715	GW	SUPE-EB-01-050218	2	2														

29

Temp 2.7 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Brendan Rick	Printed Name: Nikolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/02/2018 1819	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500791

500791

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAPIT
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha															Notes:
				Preservative	HCL															
				Total Bottle Count																
05/03/2018	0925	GW	SUPE-W-06C-050318	3	3															
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	6	6															
05/03/2018	1155	GW	SUPE-W-12A-050318	3	3															
05/03/2018	1407	GW	SUPE-W-12CR-050318	3	3															
05/03/2018	1442	GW	SUPE-EB-02-050318	3	3															
05/03/2018	1540	GW	SUPE-W-30A-050318	3	3															

3.2
Temp 3.0@1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Ben Trask	Signature: Nicholas	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Nicolb	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA	Firm:	Firm:	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500790

500790

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TABUF
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC (less naphtha)															Notes:
				Preservative	None															
				Total Bottle Count																
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	6	6															
05/03/2018	0925	GW	SUPE-W-06C-050318	3	3															
05/03/2018	1155	GW	SUPE-W-12A-050318	3	3															
05/03/2018	1407	GW	SUPE-W-12CR-050318	3	3															
05/03/2018	1442	GW	SUPE-EB-02-050318	3	3															
05/03/2018	1540	GW	SUPE-W-30A-050318	3	3															

3.2
Temp 3.2 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Likolb	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 500789

500789

Project Name: Superior 2018 1SA Sampling
Project Number: OM-0556-18
Laboratory: TAKNOX
Shipment Method FEDEX
Program: Superior 2018 1SA Sampling_001

Company: Field & Technical Services
Address: 200 Third Avenue
Carnegie, PA 15106
(412) 279-3363

Client: Beazer East, Inc.
Contact: (724) 858-5953
btrask.2006@f-ts.com

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans																Notes:
				Preservative	None																
				Total Bottle Count																	
05/03/2018	0925	GW	SUPE-W-06C-MS/MSD-050318	4	4																
05/03/2018	0925	GW	SUPE-W-06C-050318	2	2																
05/03/2018	1155	GW	SUPE-W-12A-050318	2	2																
05/03/2018	1407	GW	SUPE-W-12CR-050318	2	2																
05/03/2018	1442	GW	SUPE-EB-02-050318	2	2																
05/03/2018	1540	GW	SUPE-W-30A-050318	2	2																

3.2
Temp 3.0 #1 ICE

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Ben Trask	Signature: Cwilkow	Signature:	Signature:	☐ Rush
Printed Name: Ben Trask	Printed Name: Cikolb	Printed Name:	Printed Name:	
Firm FTS	Firm TA	Firm	Firm	☒ Standard
Date/Time: 05/03/2018 1759	Date/Time: 05/05/18 0900	Date/Time:	Date/Time:	

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Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 480-135500-2

Login Number: 135500
List Number: 1
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

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	
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	

APPENDIX F

ASCII DATA PRINTOUT