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

June 22, 2017

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

RE: First Semi-Annual 2017 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 2017 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:

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

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

W-04AR	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-06A, W-06C, W-10AR2, W-12A, W-12CR, W-28C, W-30A, and W-30C during the first semi-annual 2017 event. Monitoring well W-04AR could not be sampled during this event due to significant damage of its inner casing. Damaged monitoring well W-04AR will be properly abandoned and replaced with a new well of similar depth and construction and installed immediately adjacent to the damaged well before the next sampling 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 on April 26, 2017 and April 27, 2017. The sampling effort was led by Mr. Nathan Bachik, 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
Benzo(b)fluoranthene	0.2	W-30A
Chrysene	0.2	W-30A
PAL Exceedance		
Benzene	0.5	W-10AR2, W-30A
Benzo(a)pyrene	0.02	W-30A
Benzo(b)fluoranthene	0.02	W-30A
Chrysene	0.02	W-30A
Naphthalene	10	W-30A
2,3,7,8-TCDD TEQ*	3E-06	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, two wells (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 2017 sampling event exceeded the Wisconsin PALs.

The data evaluation performed by FTS for the first semi-annual 2017 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 2017 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

cc: J. Patarcity, Beazer
L. Paul, Koppers
D. Bessingpas, ARCADIS
S. Ashenbrucker, 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		April 26 - April 27, 2017

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

April 2017

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 6-22-17 Date

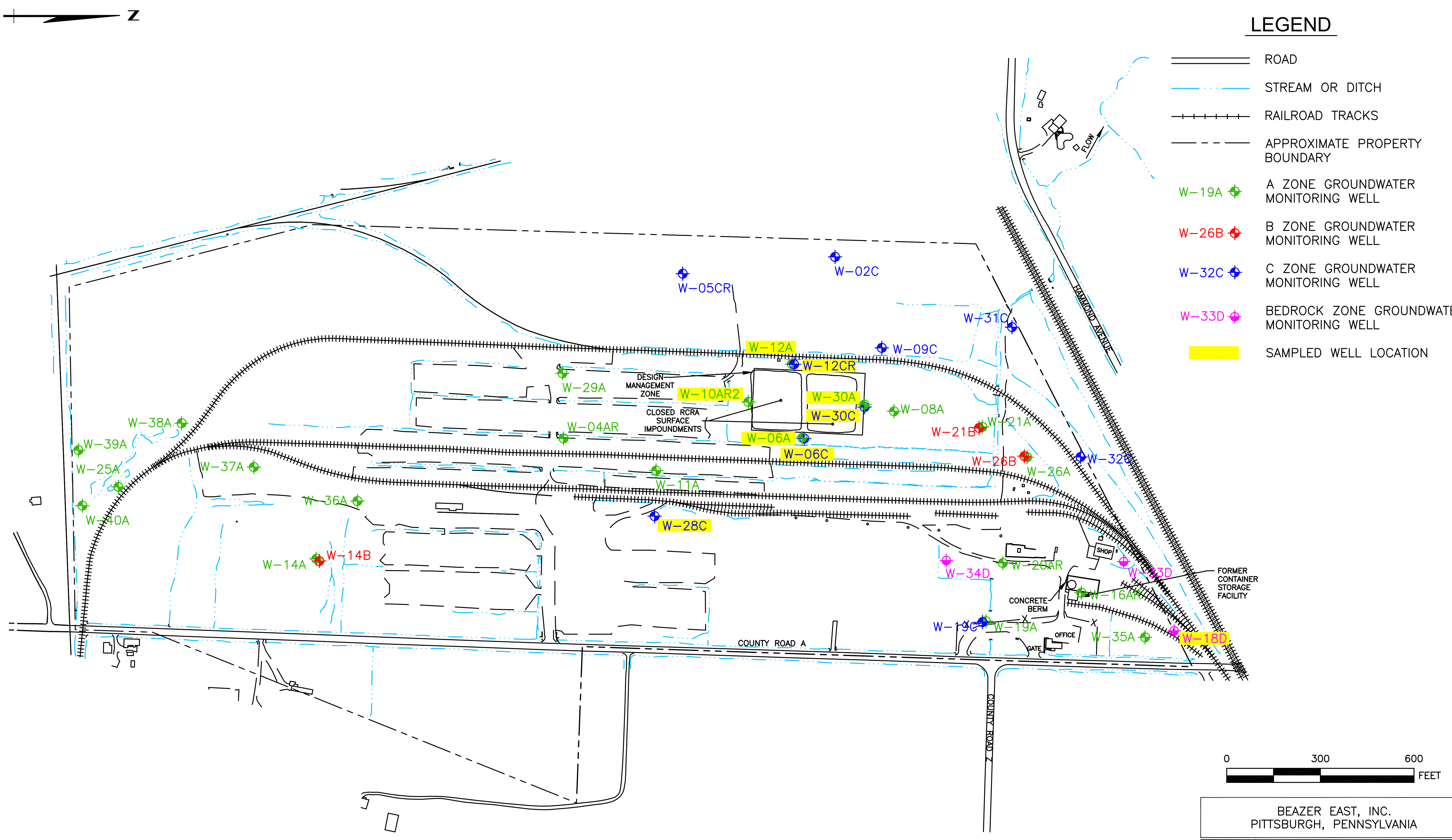
FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] 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



BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 05/26/17	
CHKD: AMG	DATE: 05/26/17	
APPD: JSZ	DATE: 06/07/17	
SCALE:	AS SHOWN	
ISSUE DATE:		

FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

FORMER KOPPERS INC. FACILITY
SUPERIOR, WISCONSIN

WELL LOCATIONS

PROJECT NO: OM055617
DRAWING NUMBER
FIGURE B−1

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

REV #	DATE	DESCRIPTION	APPD

q:\projects\beazer projects\superior\cadd\1st semi-annual 2017\figure b-1.dwg Last Saved By: Kchintella 5/26/2017 8:54 AM Plotted By: Kendra L. Chintella 5/26/2017 8:54 AM Scale: 1:1

APPENDIX C

TABLES

Table 1
Summary of Detected Constituents
First Semi-Annual 2017 Sampling Event
Superior Facility
Superior, Wisconsin

Location	Parameter	Results ug/L	PAL ug/L	ES ug/L	MCL ug/L
8270D LL					
W-10AR2	1-Methylnaphthalene	7.1	NA	NA	NA
W-30A	1-Methylnaphthalene	1.9	NA	NA	NA
W-12CR	2,3,4,6-Tetrachlorophenol	0.19 J	NA	NA	NA
W-10AR2	Acenaphthene	23	NA	NA	NA
W-30A	Acenaphthene	12	NA	NA	NA
W-10AR2	Acenaphthylene	0.46	NA	NA	NA
W-30A	Acenaphthylene	0.32	NA	NA	NA
W-10AR2	Anthracene	0.17 J	600	3000	NA
W-12A	Anthracene	0.026 J	600	3000	NA
W-30A	Anthracene	0.47	600	3000	NA
W-30A	Benzo(a)anthracene	0.5	NA	NA	NA
W-30A	Benzo(a)pyrene	0.18	0.02	0.2	NA
W-30A	Benzo(b)fluoranthene	0.29	0.02	0.2	NA
W-30A	Benzo(k)fluoranthene	0.16 J	NA	NA	NA
W-30A	Chrysene	0.5	0.02	0.2	NA
W-10AR2	Dibenzofuran	5.9	NA	NA	NA
W-30A	Dibenzofuran	3.5	NA	NA	NA
W-10AR2	Fluoranthene	0.79	80	400	NA
W-30A	Fluoranthene	3.1	80	400	NA
W-10AR2	Fluorene	5.9	80	400	NA
W-30A	Fluorene	2.7	80	400	NA
W-10AR2	Phenanthrene	0.51	NA	NA	NA
W-30A	Phenanthrene	1.3	NA	NA	NA
W-10AR2	Phenol	0.51 J	400	2000	NA
W-30A	Phenol	0.39 J	400	2000	NA
W-10AR2	Pyrene	0.41	50	250	NA
W-30A	Pyrene	2.2	50	250	NA
8260C					
W-10AR2	1,2,4-Trimethylbenzene	4.1	96*	480*	NA
W-30A	1,2,4-Trimethylbenzene	3.9	96*	480*	NA
W-10AR2	Benzene	8.6	0.5	5	5
W-30A	Benzene	5.6	0.5	5	5
W-10AR2	Ethylbenzene	19	140	700	700
W-30A	Ethylbenzene	18	140	700	700
W-10AR2	Naphthalene	2	10	100	NA
W-30A	Naphthalene	14	10	100	NA
W-10AR2	Xylene, Meta & Para	1.6 J	400**	2000**	10000**
W-30A	Xylene, Meta & Para	1.6 J	400**	2000**	10000**
W-10AR2	Xylene, Ortho	11	400**	2000**	10000**
W-30A	Xylene, Ortho	3.4	400**	2000**	10000**

Table 1
Summary of Detected Constituents
First Semi-Annual 2017 Sampling Event
Superior Facility
Superior, Wisconsin

Location	Parameter	Results ug/L	PAL ug/L	ES ug/L	MCL ug/L
8290					
W-10AR2	1,2,3,4,6,7,8-HPCDD	0.000037 J	NA	NA	NA
W-12A	1,2,3,4,6,7,8-HPCDD	0.000075	NA	NA	NA
W-30A	1,2,3,4,6,7,8-HPCDD	0.00059	NA	NA	NA
W-30A	1,2,3,4,6,7,8-HPCDF	0.00022	NA	NA	NA
W-30A	1,2,3,4,7,8-HXCDF	0.000029 J	NA	NA	NA
W-30A	1,2,3,6,7,8-HXCDD	0.000023 J	NA	NA	NA
W-30A	1,2,3,6,7,8-HXCDF	0.000037 JI	NA	NA	NA
W-10AR2	1,2,3,7,8-PECDF	0.00000057 JQ	NA	NA	NA
W-12A	1,2,3,7,8-PECDF	0.00000062 J	NA	NA	NA
W-30A	1,2,3,7,8-PECDF	0.0000023 JQ	NA	NA	NA
W-30A	2,3,7,8-TCDF	0.00000055 JQ	NA	NA	NA
W-10AR2	OCDD	0.00043	NA	NA	NA
W-12A	OCDD	0.00078	NA	NA	NA
W-30A	OCDD	0.0072	NA	NA	NA
W-12A	OCDF	0.000075 J	NA	NA	NA
W-30A	OCDF	0.00061	NA	NA	NA
W-10AR2	Total HPCDD	0.000074	NA	NA	NA
W-12A	Total HPCDD	0.00014	NA	NA	NA
W-30A	Total HPCDD	0.0012	NA	NA	NA
W-12A	Total HPCDF	0.0001	NA	NA	NA
W-30A	Total HPCDF	0.00085	NA	NA	NA
W-12A	Total HXCDF	0.00011QI	NA	NA	NA
W-30A	Total HXCDF	0.00075 I	NA	NA	NA
W-12A	Total PECDF	0.00005 Q	NA	NA	NA
W-30A	Total PECDF	0.00031 QI	NA	NA	NA
W-10AR2	Total TCDF	0.000004 J	NA	NA	NA
W-12A	Total TCDF	0.000017 Q	NA	NA	NA
W-30A	Total TCDF	0.00011 QI	NA	NA	NA
W-10AR2	2,3,7,8-TCDD TEQ	5.16E-07	3E-06	0.00003	0.00003
W-12A	2,3,7,8-TCDD TEQ	1.03E-06	3E-06	0.00003	0.00003
W-30A	2,3,7,8-TCDD TEQ	1.95E-05	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

Q - Estimated maximum possible concentration

* - 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 2017 Groundwater Data
First Semi-Annual 2017 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-06A 4/27/2017	W-06C 4/27/2017	W-10AR2 4/27/2017	W-12A 4/27/2017	W-12CR 4/27/2017	W-18D 4/26/2017	W-28C 4/27/2017	W-28C-DUP 4/27/2017	W-30A 4/27/2017	W-30C 4/26/2017	Equipment Blank 4/26/2017	Equipment Blank 4/27/2017	Trip Blank 4/26/2017	Trip Blank 4/27/2017
8260C															
1,1,1-TRICHLOROETHANE	UG/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2,4-TRIMETHYLBENZENE	UG/L	0.24 U	0.24 U	**4.1**	0.24 U	0.24 U	NA	0.24 U	0.24 U	**3.9**	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,3,5-TRIMETHYLBENZENE	UG/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
BENZENE	UG/L	0.28 U	0.28 U	**8.6**	0.28 U	0.28 U	NA	0.28 U	0.28 U	**5.6**	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
CHLOROMETHANE	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	NA	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
ETHYLBENZENE	UG/L	0.26 U	0.26 U	**19**	0.26 U	0.26 U	NA	0.26 U	0.26 U	**18**	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
METHYL(TERT)BUTYL ETHER	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
NAPHTHALENE	UG/L	0.25 U	0.25 U	**2**	0.25 U	0.25 U	NA	0.25 U	0.25 U	**14**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
N-BUTYLBENZENE	UG/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
N-PROPYLBENZENE	UG/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
STYRENE	UG/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOLUENE	UG/L	0.23 U	0.23 U	0.94 U	0.23 U	0.23 U	NA	0.23 U	0.23 U	0.43 U	0.23 U	**0.41 J**	**0.4 J**	**0.43 J**	**0.39 J**
XYLENE, META & PARA	UG/L	0.24 U	0.24 U	**1.6 J**	0.24 U	0.24 U	NA	0.24 U	0.24 U	**1.6 J**	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
O-XYLENE	UG/L	0.28 U	0.28 U	**11**	0.28 U	0.28 U	NA	0.28 U	0.28 U	**3.4**	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
8270D LL															
1,2,4-TRICHLOROBENZENE	UG/L	0.082 U	0.082 U	0.085 U	0.079 U	0.082 U	0.079 U	0.082 U	0.079 U	0.082 U	0.082 U	0.085 U	0.085 U	NA	NA
1,2-DICHLOROBENZENE	UG/L	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	NA	NA
1,3-DICHLOROBENZENE	UG/L	0.072 U	0.072 U	0.075 U	0.07 U	0.072 U	0.07 U	0.072 U	0.07 U	0.072 U	0.072 U	0.075 U	0.075 U	NA	NA
1,4-DICHLOROBENZENE	UG/L	0.16 U	0.16 U	0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	NA	NA
1-METHYLNAPHTHALENE	UG/L	0.03 U	0.03 U	**7.1**	0.029 U	0.03 U	0.029 U	0.03 U	0.029 U	**1.9**	0.03 U	0.031 U	0.031 U	NA	NA
2,3,4,6-TETRACHLOROPHENOL	UG/L	0.1 U	0.1 U	0.11 U	0.098 U	**0.19 J**	0.098 U	0.1 U	0.098 U	0.1 U	0.1 U	0.11 U	0.11 U	NA	NA
2,3,5,6-TETRACHLOROPHENOL	UG/L	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA
2,4,5-TRICHLOROPHENOL	UG/L	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA
2,4,6-TRICHLOROPHENOL	UG/L	0.29 U	0.29 U	0.3 U	0.28 U	0.29 U	0.28 U	0.29 U	0.28 U	0.29 U	0.29 U	0.3 U	0.3 U	NA	NA
2,4-DICHLOROPHENOL	UG/L	0.065 U	0.065 U	0.067 U	0.062 U	0.065 U	0.062 U	0.065 U	0.062 U	0.065 U	0.065 U	0.067 U	0.067 U	NA	NA
2,4-DIMETHYLPHENOL	UG/L	0.16 U	0.16 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.17 U	NA	NA
2,4-DINITROPHENOL	UG/L	2.4 U	2.4 U	2.5 U	2.3 U	2.4 U	2.3 U	2.4 U	2.3 U	2.4 U	2.4 U	2.5 U	2.5 U	NA	NA
2,4-DINITROTOLUENE	UG/L	0.21 U	0.21 U	0.21 U	0.2 U	0.21 U	0.2 U	0.21 U	0.2 U	0.21 U	0.21 U	0.21 U	0.21 U	NA	NA
2,6-DINITROTOLUENE	UG/L	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	NA	NA
2-CHLORONAPHTHALENE	UG/L	0.03 U	0.03 U	0.031 U	0.028 U	0.03 U	0.028 U	0.03 U	0.028 U	0.03 U	0.03 U	0.031 U	0.031 U	NA	NA
2-CHLOROPHENOL	UG/L	0.22 U	0.22 U	0.23 U	0.21 U	0.22 U	0.21 U	0.22 U	0.21 U	0.22 U	0.22 U	0.23 U	0.23 U	NA	NA
2-METHYLNAPHTHALENE	UG/L	0.018 U	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.019 U	0.019 U	NA	NA
2-METHYLPHENOL	UG/L	0.18 U	0.18 U	0.19 U	0.17 U	0.18 U	0.17 U	0.18 U	0.17 U	0.18 U	0.18 U	0.19 U	0.19 U	NA	NA
2-NITROANILINE	UG/L	0.65 U	0.65 U	0.67 U	0.62 U	0.65 U	0.62 U	0.65 U	0.62 U	0.65 U	0.65 U	0.67 U	0.67 U	NA	NA
2-NITROPHENOL	UG/L	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA
3,3'-DICHLOROBENZIDINE	UG/L	0.14 U	0.14 U	0.15 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	NA	NA
3-NITROANILINE	UG/L	0.77 U	0.77 U	0.81 U	0.75 U	0.77 U	0.75 U	0.77 U	0.75 U	0.77 U	0.77 U	0.81 U	0.81 U	NA	NA
4,6-DINITRO-2-METHYLPHENOL	UG/L	1.5 U	1.5 U	1.6 U	1.4 U	1.5 U	1.4 U	1.5 U	1.4 U	1.5 U	1.5 U	1.6 U	1.6 U	NA	NA
4-BROMOPHENYL PHENYLETHER	UG/L	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA

Table 2
Analytical Summary - First Semi-Annual 2017 Groundwater Data
First Semi-Annual 2017 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-06A 4/27/2017	W-06C 4/27/2017	W-10AR2 4/27/2017	W-12A 4/27/2017	W-12CR 4/27/2017	W-18D 4/26/2017	W-28C 4/27/2017	W-28C-DUP 4/27/2017	W-30A 4/27/2017	W-30C 4/26/2017	Equipment Blank 4/26/2017	Equipment Blank 4/27/2017	Trip Blank 4/26/2017	Trip Blank 4/27/2017
4-CHLORO-3-METHYLPHENOL	UG/L	0.16 U	0.16 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.17 U	NA	NA
4-CHLOROANILINE	UG/L	0.28 U	0.28 U	0.29 U	0.27 U	0.28 U	0.27 U	0.28 U	0.27 U	0.28 U	0.28 U	0.29 U	0.29 U	NA	NA
4-CHLOROPHENYLPHENYL-ETHER	UG/L	0.077 U	0.077 U	0.08 U	0.074 U	0.077 U	0.074 U	0.077 U	0.074 U	0.077 U	0.077 U	0.08 U	0.08 U	NA	NA
4-METHYLPHENOL	UG/L	0.2 U	0.2 U	0.21 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U	0.21 U	0.21 U	NA	NA
4-NITROANILINE	UG/L	0.74 U	0.74 U	0.77 U	0.72 U	0.74 U	0.72 U	0.74 U	0.72 U	0.74 U	0.74 U	0.77 U	0.77 U	NA	NA
4-NITROPHENOL	UG/L	0.77 U	0.77 U	0.8 U	0.74 U	0.77 U	0.74 U	0.77 U	0.74 U	0.77 U	0.77 U	0.8 U	0.8 U	NA	NA
ACENAPHTHENE	UG/L	0.028 U	0.028 U	**23**	0.027 U	0.028 U	0.027 U	0.028 U	0.027 U	**12**	0.028 U	0.029 U	0.029 U	NA	NA
ACENAPHTHYLENE	UG/L	0.021 U	0.021 U	**0.46**	0.02 U	0.021 U	0.02 U	0.021 U	0.02 U	**0.32**	0.021 U	0.022 U	0.022 U	NA	NA
ANTHRACENE	UG/L	0.018 U	0.018 U	**0.17 J**	**0.026 J**	0.018 U	0.018 U	0.018 U	0.018 U	**0.47**	0.018 U	0.019 U	0.019 U	NA	NA
BENZO (A) ANTHRACENE	UG/L	0.035 U	0.035 U	0.037 U	0.034 U	0.035 U	0.034 U	0.035 U	0.034 U	**0.5**	0.035 U	0.037 U	0.037 U	NA	NA
BENZO (A) PYRENE	UG/L	0.027 U	0.027 U	0.028 U	0.026 U	0.027 U	0.026 U	0.027 U	0.026 U	**0.18**	0.027 U	0.028 U	0.028 U	NA	NA
BENZO (B) FLUORANTHENE	UG/L	0.047 U	0.047 U	0.049 U	0.045 U	0.047 U	0.045 U	0.047 U	0.045 U	**0.29**	0.047 U	0.049 U	0.049 U	NA	NA
BENZO (G,H,I) PERYLENE	UG/L	0.028 U	0.028 U	0.029 U	0.027 U	0.028 U	0.027 U	0.028 U	0.027 U	0.028 U	0.028 U	0.029 U	0.029 U	NA	NA
BENZO (K) FLUORANTHENE	UG/L	0.029 U	0.029 U	0.03 U	0.028 U	0.029 U	0.028 U	0.029 U	0.028 U	**0.16 J**	0.029 U	0.03 U	0.03 U	NA	NA
BENZOIC ACID	UG/L	1.6 U	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.8 U	1.5 U	1.6 U	1.6 U	1.6 U	**1.9 J**	NA	NA
BENZYL ALCOHOL	UG/L	0.19 U	0.19 U	0.2 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.2 U	NA	NA
BIS (2-CHLOROETHOXY)- METHANE	UG/L	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.13 U	0.13 U	NA	NA
BIS (2-CHLOROETHYL) ETHER	UG/L	0.03 U	0.03 U	0.032 U	0.029 U	0.03 U	0.029 U	0.03 U	0.029 U	0.03 U	0.03 U	0.032 U	0.032 U	NA	NA
BIS (2-CHLOROISOPROPYL)-ETHER	UG/L	0.023 U	0.023 U	0.024 U	0.022 U	0.023 U	0.022 U	0.023 U	0.022 U	0.023 U	0.023 U	0.024 U	0.024 U	NA	NA
BIS (2-ETHYLHEXYL)- PHTHALATE	UG/L	1.6 U	0.97 U	0.5 U	0.62 U	0.42 U	0.41 U	2 U	0.41 U	2.9 U	0.92 U	**0.83 J**	**1.9 J**	NA	NA
BUTYL BENZYL PHTHALATE	UG/L	0.21 U	0.21 U	0.21 U	0.2 U	0.21 U	0.2 U	0.21 U	0.2 U	0.21 U	0.21 U	0.21 U	0.21 U	NA	NA
CHRYSENE	UG/L	0.03 U	0.03 U	0.031 U	0.029 U	0.03 U	0.029 U	0.03 U	0.029 U	**0.5**	0.03 U	0.031 U	0.031 U	NA	NA
DIBENZO (A,H) ANTHRACENE	UG/L	0.026 U	0.026 U	0.027 U	0.025 U	0.026 U	0.025 U	0.026 U	0.025 U	0.026 U	0.026 U	0.027 U	0.027 U	NA	NA
DIBENZOFURAN	UG/L	0.093 U	0.093 U	**5.9**	0.089 U	0.093 U	0.089 U	0.093 U	0.089 U	**3.5**	0.093 U	0.097 U	0.097 U	NA	NA
DIETHYLPHTHALATE	UG/L	0.29 U	0.29 U	0.3 U	0.27 U	0.29 U	0.27 U	0.29 U	0.27 U	0.29 U	0.29 U	0.3 U	0.3 U	NA	NA
DIMETHYLPHTHALATE	UG/L	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	0.17 U	0.18 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	NA
DI-N-BUTYLPHTHALATE	UG/L	0.35 U	0.81 U	0.24 U	0.96 U	0.23 U	0.22 U	0.23 U	0.22 U	0.23 U	0.25 U	**0.31 J**	**0.36 J**	NA	NA
DI-N-OCTYLPHTHALATE	UG/L	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
FLUORANTHENE	UG/L	0.02 U	0.02 U	**0.79**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**3.1**	0.02 U	0.021 U	0.021 U	NA	NA
FLUORENE	UG/L	0.023 U	0.023 U	**5.9**	0.022 U	0.023 U	0.022 U	0.023 U	0.022 U	**2.7**	0.023 U	0.024 U	0.024 U	NA	NA
HEXACHLOROBENZENE	UG/L	0.059 U	0.059 U	0.061 U	0.056 U	0.059 U	0.056 U	0.059 U	0.056 U	0.059 U	0.059 U	0.061 U	0.061 U	NA	NA
HEXACHLOROBUTADIENE	UG/L	0.09 U	0.09 U	0.094 U	0.087 U	0.09 U	0.087 U	0.09 U	0.087 U	0.09 U	0.09 U	0.094 U	0.094 U	NA	NA
HEXACHLOROCYCLOPENTADIENE	UG/L	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	NA	NA
HEXACHLOROETHANE	UG/L	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	NA	NA
INDENO (1,2,3-CD) PYRENE	UG/L	0.042 U	0.042 U	0.043 U	0.04 U	0.042 U	0.04 U	0.042 U	0.04 U	0.042 U	0.042 U	0.043 U	0.043 U	NA	NA
ISOPHORONE	UG/L	0.071 U	0.071 U	0.074 U	0.068 U	0.071 U	0.068 U	0.071 U	0.068 U	0.071 U	0.071 U	0.074 U	0.074 U	NA	NA
NAPHTHALENE	UG/L	NA	NA	NA	NA	NA	0.021 U	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE	UG/L	0.14 U	0.14 U	0.15 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	NA	NA
N-NITROSODI-N-PROPYLAMINE	UG/L	0.048 U	0.048 U	0.05 U	0.046 U	0.048 U	0.046 U	0.048 U	0.046 U	0.048 U	0.048 U	0.05 U	0.05 U	NA	NA
N-NITROSO-DI-PHENYLAMINE	UG/L	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA
PENTACHLOROPHENOL	UG/L	0.48 U	0.48 U	0.5 U	0.46 U	0.48 U	0.46 U	0.48 U	0.46 U	0.48 U	0.48 U	0.5 U	0.5 U	NA	NA
PHENANTHRENE	UG/L	0.04 U	0.04 U	**0.51**	0.038 U	0.04 U	0.038 U	0.04 U	0.038 U	**1.3**	0.04 U	0.042 U	0.042 U	NA	NA
PHENOL	UG/L	0.053 U	0.053 U	**0.51 J**	0.051 U	0.053 U	0.051 U	0.053 U	0.051 U	**0.39 J**	0.053 U	0.055 U	0.055 U	NA	NA
PYRENE	UG/L	0.022 U	0.022 U	**0.41**	0.021 U	0.022 U	0.021 U	0.022 U	0.021 U	**2.2**	0.022 U	0.023 U	0.023 U	NA	NA

Table 2
Analytical Summary - First Semi-Annual 2017 Groundwater Data
First Semi-Annual 2017 Sampling Event
Superior Facility
Superior, Wisconsin

ANALYTE NAME	UNITS	W-06A 4/27/2017	W-06C 4/27/2017	W-10AR2 4/27/2017	W-12A 4/27/2017	W-12CR 4/27/2017	W-18D 4/26/2017	W-28C 4/27/2017	W-28C-DUP 4/27/2017	W-30A 4/27/2017	W-30C 4/26/2017	Equipment Blank 4/26/2017	Equipment Blank 4/27/2017	Trip Blank 4/26/2017	Trip Blank 4/27/2017
8290															
1,2,3,4,6,7,8-HPCDD (TEF = 0.01)	UG/L	0.00001 U	0.000011 U	**0.000037 J**	**0.000075**	0.000003 U	NA	0.0000072 U	0.0000054 U	**0.00059**	0.0000052 U	**0.0000036 J**	**0.0000071 J**	NA	NA
1,2,3,4,6,7,8-HPCDF (TEF = 0.01)	UG/L	0.0000037 U	0.000004 U	0.000014 U	0.000026 U	0.0000025 U	NA	0.00001 U	0.0000048 U	**0.00022**	0.0000028 U	**0.0000025 J**	**0.0000036 J**	NA	NA
1,2,3,4,7,8,9-HPCDF (TEF = 0.01)	UG/L	0.0000016 U	0.00000094 U	0.0000028 U	0.000038 U	0.0000026 U	NA	0.0000045 U	0.0000035 U	0.000022 U	0.0000035 U	**0.0000029 J**	**0.000002 J**	NA	NA
1,2,3,4,7,8-HXCDD (TEF = 0.1)	UG/L	0.00000068 U	0.00000082 U	0.0000012 U	0.00000066 U	0.0000013 U	NA	0.0000035 U	0.000002 U	0.0000027 U	0.000002 U	**0.0000013 JQ**	**0.0000011 J**	NA	NA
1,2,3,4,7,8-HXCDF (TEF = 0.1)	UG/L	0.0000011 U	0.00000082 U	0.000003 U	0.0000044 U	0.0000013 U	NA	0.0000034 U	0.0000021 U	**0.000029 J**	0.00000037 U	**0.0000015 JQ**	**0.0000012 J**	NA	NA
1,2,3,6,7,8-HXCDD (TEF = 0.1)	UG/L	0.0000011 U	0.00000067 U	0.0000026 U	0.0000035 U	0.0000013 U	NA	0.0000023 U	0.0000018 U	**0.000023 J**	0.0000017 U	**0.0000015 JQ**	**0.0000011 JQ**	NA	NA
1,2,3,6,7,8-HXCDF (TEF = 0.1)	UG/L	0.0000022 U	0.00000075 U	0.0000033 U	0.0000079 U	0.0000011 U	NA	0.0000026 U	0.0000019 U	**0.000037 JI**	0.0000014 U	**0.0000018 J**	**0.00000098 JQ**	NA	NA
1,2,3,7,8,9-HXCDD (TEF = 0.1)	UG/L	0.0000014 U	0.00000096 U	0.0000015 U	0.0000012 U	0.0000014 U	NA	0.0000039 U	0.0000023 U	0.0000059 U	0.0000027 U	**0.0000021 J**	**0.00000098 JQ**	NA	NA
1,2,3,7,8,9-HXCDF (TEF = 0.1)	UG/L	0.00000043 U	0.00000032 U	0.0000017 U	0.0000015 U	0.0000015 U	NA	0.0000036 U	0.0000023 U	0.0000044 U	0.0000018 U	**0.0000017 JQ**	0.00000046 U	NA	NA
1,2,3,7,8-PECDD (TEF = 1)	UG/L	0.00000027 U	0.00000029 U	0.0000003 U	0.00000024 U	0.00000059 U	NA	0.00000086 U	0.00000049 U	0.0000011 U	0.00000077 U	**0.00000074 JQ**	**0.00000012 JQ**	NA	NA
1,2,3,7,8-PECDF (TEF = 0.03)	UG/L	0.00000038 U	0.00000038 U	**0.00000057 JQ**	**0.00000062 J**	0.00000048 U	NA	0.00000062 U	0.00000086 U	**0.0000023 JQ**	0.00000089 U	0.0000012 U	0.00000038 U	NA	NA
2,3,4,6,7,8-HXCDF (TEF = 0.1)	UG/L	0.0000016 U	0.00000075 U	0.0000017 U	0.0000012 U	0.0000016 U	NA	0.0000038 U	0.0000021 U	0.0000036 U	0.0000026 U	**0.0000022 JQ**	**0.00000098 JQ**	NA	NA
2,3,4,7,8-PECDF (TEF = 0.3)	UG/L	0.00000037 U	0.00000037 U	0.0000003 U	0.00000056 U	0.00000044 U	NA	0.000002 U	0.0000018 U	0.000004 U	0.00000086 U	0.0000011 U	0.00000037 U	NA	NA
2,3,7,8-TCDD (TEF = 1)	UG/L	0.00000051 U	0.00000055 U	0.00000065 U	0.0000006 U	0.00000048 U	NA	0.00000047 U	0.00000096 U	0.00000049 U	0.00000083 U	0.00000093 U	0.00000061 U	NA	NA
2,3,7,8-TCDF (TEF = 0.1)	UG/L	0.00000064 U	0.00000046 U	0.00000052 U	0.0000005 U	0.00000038 U	NA	0.00000045 U	0.00000063 U	**0.00000055 JQ**	0.00000081 U	0.0000011 U	0.00000043 U	NA	NA
OCDD (TEF = 0.0003)	UG/L	0.0001 U	0.00011 U	**0.00043**	**0.00078**	0.000021 U	NA	0.000035 U	0.000035 U	**0.0072**	0.000036 U	**0.000013 J**	**0.00008 J**	NA	NA
OCDF (TEF = 0.0003)	UG/L	0.000013 U	0.000011 U	0.000039 U	**0.000075 J**	0.0000081 U	NA	0.000025 U	0.000015 U	**0.00061**	0.0000087 U	**0.0000069 J**	**0.00001 J**	NA	NA
TOTAL HPCDD	UG/L	0.000025 U	0.000036 U	**0.000074**	**0.00014**	0.000007 U	NA	0.000012 U	0.000012 U	**0.0012**	0.000012 U	**0.0000036 J**	**0.000014 J**	NA	NA
TOTAL HPCDF	UG/L	0.000012 U	0.00001 U	0.000048 U	**0.0001**	0.0000057 U	NA	0.000016 U	0.0000095 U	**0.00085**	0.0000083 U	**0.0000059 JQ**	**0.00001 J**	NA	NA
TOTAL HXCDD	UG/L	0.0000046 U	0.0000044 U	0.0000095 U	0.000012 U	0.0000046 U	NA	0.000011 U	0.0000077 U	0.000088 U	0.0000077 U	**0.0000049 JQ**	**0.0000037 JQ**	NA	NA
TOTAL HXCDF	UG/L	0.000011 U	0.0000059 U	0.000042 U	**0.00011 IQ**	0.0000068 U	NA	0.000016 U	0.000013 U	**0.00075 I**	0.0000086 U	**0.00001 JQ**	**0.0000046 JQ**	NA	NA
TOTAL PECDD	UG/L	0.00000027 U	0.00000029 U	0.0000003 U	0.00000024 U	0.00000059 U	NA	0.00000086 U	0.00000089 U	0.0000016 U	0.0000029 U	**0.0000027 JQ**	**0.00000054 JQ**	NA	NA
TOTAL PECDF	UG/L	0.0000023 U	0.00000038 U	0.000012 U	**0.00005 Q**	0.00000048 U	NA	0.0000028 U	0.0000032 U	**0.00031 IQ**	0.00000089 U	0.0000012 U	0.00000038 U	NA	NA
TOTAL TCDD	UG/L	0.00000051 U	0.00000055 U	0.00000065 U	0.0000006 U	0.00000048 U	NA	0.00000047 U	0.00000096 U	0.00000049 U	0.00000083 U	0.00000093 U	0.00000061 U	NA	NA
TOTAL TCDF	UG/L	0.00000064 U	0.00000046 U	**0.000004 J**	**0.000017 Q**	0.00000038 U	NA	0.00000045 U	0.00000063 U	**0.00011 IQ**	0.00000081 U	0.0000011 U	0.00000043 U	NA	NA
2,3,7,8-TCDD TEQ - ND = 0	UG/L	0.00E+00	0.00E+00	**5.161E-07**	**1.0251E-06**	0.00E+00	NA	0.00E+00	0.00E+00	**1.9467E-05**	0.00E+00	**2.04597E-06**	**9.08E-07**	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.
Q indicates estimated maximum possible concentration.
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: May 11, 2017

FROM: Kendra Chintella

SUBJECT: Superior GW

SAMPLE DELIVERY GROUP (SDG): 180-65736-1

SAMPLES: SUPE-TB-02-042717, SUPE-W-28C-042717, SUPE-W-12CR-042717, SUPE-W-30A-042717, SUPE-W-10AR2-042717, SUPE-EB-02-042717, SUPE-M-99A-042717(W-28C), SUPE-TB-01-042617, SUPE-W-30C-042617, SUPE-EB-01-042617, SUPE-W-06A-042717, SUPE-W-06C-042717, SUPE-W-12A-042717, SUPE-W-18D-042617

ANALYSES: Method 8260C (VOCs), 8270D LL (SVOCs), 8290 (Dioxins/Furans)

LABORATORY: TestAmerica Laboratories, Inc., Pittsburgh, Canton. 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: Several dioxins/furans were detected in the method blank. See attached page for details.

□ Field Blank Contamination
Noncompliance: Toluene was detected in the trip blanks. Toluene, benzoic acid, bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, and several dioxins/furans were detected in the equipment blanks. See attached page for details.

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

□ Surrogate Recoveries
Noncompliance: None

□ Laboratory Control Sample
Noncompliance: The LCSD RPDs for benzo(b)fluoranthene and 4-nitrophenol were above the recovery limits. No action was taken on this basis.

Laboratory Blank Contamination:

The following analytes were detected in the aqueous method blank at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
1,2,3,4,6,7,8-HpCDD	6.63 J pg/l	33.15 pg/l
1,2,3,4,6,7,8-HpCDF	6.34 J pg/l	31.7 pg/l
1,2,3,4,7,8,9-HpCDF	6.28 J pg/l	31.4 pg/l
1,2,3,4,7,8-HxCDD	3.88 J pg/l	19.4 pg/l
1,2,3,4,7,8-HxCDF	3.05 Jq pg/l	15.25 pg/l
1,2,3,6,7,8-HxCDD	4.28 J pg/l	21.4 pg/l
1,2,3,6,7,8-HxCDF	3.42 J pg/l	17.1 pg/l
1,2,3,7,8-PeCDD	1.69 Jq pg/l	8.45 pg/l
1,2,3,7,8,9-HxCDD	4.49 J pg/l	22.45 pg/l
1,2,3,7,8,9-HxCDF	4.99 Jq pg/l	24.95 pg/l
2,3,4,6,7,8-HxCDF	4.31 Jq pg/l	21.55 pg/l
2,3,4,7,8-PeCDF	2.85 J pg/l	14.25 pg/l
OCDD	17.1 J pg/l	85.5 pg/l
OCDF	14.8 J pg/l	74 pg/l
Total HpCDD	9.75 J pg/l	48.75 pg/l
Total HpCDF	12.6 J pg/l	63 pg/l
Total HxCDD	25.1 Jq pg/l	125.5 pg/l
Total HxCDF	19 Jq pg/l	95 pg/l
Total PeCDD	3.4 Jq pg/l	17 pg/l
Total PeCDF	2.85 J pg/l	14.25 pg/l

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

Field Blank Contamination:

The following analytes were detected in the aqueous equipment blank, SUPE-EB-01-042617, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Toluene	0.41 J ug/l	2.05 ug/l
bis(2-Ethylhexyl)phthalate	0.83 J ug/l	4.15 ug/l
Di-n-butyl phthalate	0.31 J ug/l	1.55 ug/l
1,2,3,4,6,7,8-HpCDD	3.6 JB pg/l	18 pg/l
1,2,3,4,6,7,8-HpCDF	2.5 JB pg/l	12.5 pg/l
1,2,3,4,7,8,9-HpCDF	2.9 JB pg/l	14.5 pg/l
1,2,3,4,7,8-HxCDD	1.3 JBq pg/l	6.5 pg/l
1,2,3,4,7,8-HxCDF	1.5 JBq pg/l	7.5 pg/l
1,2,3,6,7,8-HxCDD	1.5 JBq pg/l	7.5 pg/l
1,2,3,6,7,8-HxCDF	1.8 JB pg/l	9 pg/l
1,2,3,7,8-PeCDD	0.74 JBq pg/l	3.7 pg/l
1,2,3,7,8,9-HxCDD	2.1 JB pg/l	10.5 pg/l
1,2,3,7,8,9-HxCDF	1.7 JBq pg/l	8.5 pg/l
2,3,4,6,7,8-HxCDF	2.2 JBq pg/l	11 pg/l
OCDD	13 JB pg/l	65 pg/l
OCDF	6.9 JB pg/l	34.5 pg/l

Total HpCDD	3.6 JB pg/l	18 pg/l
Total HpCDF	5.9 JBq pg/l	29.5 pg/l
Total HxCDD	4.9 JBq pg/l	24.5 pg/l
Total HxCDF	10 JBq pg/l	50 pg/l
Total PeCDD	2.7 JBq pg/l	13.5 pg/l

The following analytes were detected in the aqueous equipment blank, SUPE-EB-02-042717, at the following concentrations:

Analyte	Maximum Concentration	Blank Action Level
Toluene	0.4 J ug/l	2 ug/l
Benzoic acid	1.9 J ug/l	9.5 ug/l
bis(2-Ethylhexyl)phthalate	1.9 J ug/l	9.5 ug/l
Di-n-butyl phthalate	0.36 J ug/l	1.8 ug/l
1,2,3,4,6,7,8-HpCDD	7.1 JB pg/l	35.5 pg/l
1,2,3,4,6,7,8-HpCDF	3.6 JB pg/l	18 pg/l
1,2,3,4,7,8,9-HpCDF	2 JB pg/l	10 pg/l
1,2,3,4,7,8-HxCDD	1.1 JB pg/l	5.5 pg/l
1,2,3,4,7,8-HxCDF	1.2 JB pg/l	6 pg/l
1,2,3,6,7,8-HxCDD	1.1 JBq pg/l	5.5 pg/l
1,2,3,6,7,8-HxCDF	0.98 JBq pg/l	4.9 pg/l
1,2,3,7,8-PeCDD	0.12 JBq pg/l	0.6 pg/l
1,2,3,7,8,9-HxCDD	0.98 JBq pg/l	4.9 pg/l
2,3,4,6,7,8-HxCDF	0.98 JBq pg/l	4.9 pg/l
OCDD	80 JB pg/l	400 pg/l
OCDF	10 JB pg/l	50 pg/l
Total HpCDD	14 JB pg/l	70 pg/l
Total HpCDF	10 JB pg/l	50 pg/l
Total HxCDD	3.7 JBq pg/l	18.5 pg/l
Total HxCDF	4.6 JBq pg/l	23 pg/l
Total PeCDD	0.54 JBq pg/l	2.7 pg/l

The following analyte was detected in the aqueous trip blank, SUPE-TB-01-042617, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Toluene	0.43 J ug/l	2.15 ug/l

The following analyte was detected in the aqueous trip blank, SUPE-TB-02-042717, at the following concentration:

Analyte	Maximum Concentration	Blank Action Level
Toluene	0.39 J ug/l	1.95 ug/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	M-99A	QUAL	RPD
Benzoic acid	1.8	J	1.5	U	NC
Bis(2-ethylhexyl)phthalate	2		0.41	U	NC
1,2,3,4,6,7,8-HpCDD	7.2	JB	5.4	JB	28.57
1,2,3,4,6,7,8-HpCDF	10	JB	4.8	JB	70.27*
1,2,3,4,7,8,9-HpCDF	4.5	JB	3.5	JB	25.00
1,2,3,4,7,8-HxCDD	3.5	JB	2	JB	54.55*
1,2,3,4,7,8-HxCDF	3.4	JB	2.1	JBq	47.27*
1,2,3,6,7,8-HxCDD	2.3	JB	1.8	JBq	24.39
1,2,3,6,7,8-HxCDF	2.6	JBq	1.9	JBq	31.11*
1,2,3,7,8,9-HxCDD	3.9	JB	2.3	JBq	51.61*
1,2,3,7,8,9-HxCDF	3.6	JB	2.3	JB	44.07*
2,3,4,6,7,8-HxCDF	3.8	JB	2.1	JBq	57.63*
2,3,4,7,8-PeCDF	2	JBq	1.8	JBq	10.53
OCDD	35	JB	35	JB	0.00
OCDF	25	JB	15	JB	50.00*
Total HpCDD	12	JB	12	JBq	0.00
Total HpCDF	16	JB	9.5	JB	50.98*
Total HxCDF	16	JBq	13	JBq	20.69
Total HxCDD	11	JBq	7.7	JBq	35.29*
Total PeCDD	0.86	U	0.89	JBq	NC
Total PeCDF	2.8	JBq	3.2	JBq	13.33

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 Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-65736-1
Client Project/Site: Superior, WI Semiannual Groundwater

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

Attn: Ms. Angie Gatchie

Veronica Bortot

Authorized for release by:
5/10/2017 3:24:56 PM

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

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

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

Table of Contents

Case Narrative

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

TestAmerica Job ID: 180-65736-1

Job ID: 180-65736-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-65736-1

Receipt
The samples were received on 4/28/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5º C and 3.1º C.

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

GC/MS Semi VOA
Method(s) 8270D LL: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 180-210177 recovered outside control limits for the following analytes: Benzo[b]fluoranthene and 4-Nitrophenol.

Method(s) 8270D LL: The continuing calibration verification (CCV) analyzed in 180-210324 was outside the method criteria for the following analyte(s): Nitrobenzene-d5 (Surr). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 180-210324 recovered above the upper control limit for 4-Nitrophenol and 2,2'-oxybis(1-chloropropane). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: CCVIS 180-210324/3.

Method(s) 8270D LL: One Acid Surrogate recovery for the following sample was outside control limits; There were no Acid compounds detected in the sample thus report as measured: SUPE-EB-01-042617. Evidence of matrix interferences is not obvious.

Method(s) 8270D LL: The continuing calibration verification (CCV) analyzed in 180-210526 was outside the method criteria for the following analyte(s): 2,4,6-Tribromophenol (Surr). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

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

Definitions/Glossary

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

TestAmerica Job ID: 180-65736-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits

Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.
I	Value is EMPC (estimated maximum possible concentration).
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.

Glossary

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

Accreditation/Certification Summary

Client: Field & Technical Services LLC
TestAmerica Job ID: 180-65736-1
Project/Site: Superior, WI Semiannual Groundwater

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	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-18
South Carolina	State Program	4	89014	04-30-17 *
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	10-31-17
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-17

Laboratory: TestAmerica Canton

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
California	State Program	9	2927	04-30-17 *
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17 *
Illinois	NELAP	5	200004	07-31-17 *
Kansas	NELAP	7	E-10336	01-31-18
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17
Minnesota	NELAP	5	039-999-348	12-31-17
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-17 *
New Jersey	NELAP	2	OH001	06-30-17 *
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17 *
Texas	NELAP	6	T104704517-15-5	08-31-17 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-18
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17 *

Laboratory: TestAmerica Knoxville

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

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 180-65736-1

Laboratory: TestAmerica Knoxville (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
	AFCEE		N/A	
Arkansas DEQ	State Program	6	88-0688	06-16-17
California	State Program	9	2423	06-30-18
Colorado	State Program	8	TN00009	02-28-18
Connecticut	State Program	1	PH-0223	09-30-17
Florida	NELAP	4	E87177	06-30-17
Georgia	State Program	4	906	04-13-17 *
Hawaii	State Program	9	N/A	04-13-18
Kansas	NELAP	7	E-10349	10-31-17
Kentucky (DW)	State Program	4	90101	12-31-17
L-A-B	DoD ELAP		L2311	02-13-19
Louisiana	NELAP	6	83979	06-30-17
Louisiana (DW)	NELAP	6	LA160005	12-31-17
Maryland	State Program	3	277	03-31-18
Michigan	State Program	5	9933	04-13-17 *
Nevada	State Program	9	TN00009	07-31-17
New Jersey	NELAP	2	TN001	06-30-17
New York	NELAP	2	10781	03-31-18
North Carolina (DW)	State Program	4	21705	07-31-17
North Carolina (WW/SW)	State Program	4	64	12-31-17
Ohio VAP	State Program	5	CL0059	11-22-18
Oklahoma	State Program	6	9415	08-31-17
Pennsylvania	NELAP	3	68-00576	12-31-17
Tennessee	State Program	4	2014	04-13-20
Texas	NELAP	6	T104704380-16-9	08-31-17
USDA	Federal		P330-13-00262	08-20-19
Utah	NELAP	8	TN00009	07-31-17
Virginia	NELAP	3	460176	09-14-17
Washington	State Program	10	C593	01-19-18
West Virginia (DW)	State Program	3	9955C	12-31-17
West Virginia DEP	State Program	3	345	04-30-18
Wisconsin	State Program	5	998044300	08-31-17

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

Sample Summary

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

TestAmerica Job ID: 180-65736-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-65736-1	SUPE-TB-02-042717	Water	04/27/17 09:10	04/28/17 09:00
180-65736-2	SUPE-W-28C-042717	Water	04/27/17 09:10	04/28/17 09:00
180-65736-3	SUPE-W-12CR-042717	Water	04/27/17 11:12	04/28/17 09:00
180-65736-4	SUPE-W-30A-042717	Water	04/27/17 12:43	04/28/17 09:00
180-65736-5	SUPE-W-10AR2-042717	Water	04/27/17 14:51	04/28/17 09:00
180-65736-6	SUPE-EB-02-042717	Water	04/27/17 15:56	04/28/17 09:00
180-65736-7	SUPE-M-99A-042717	Water	04/27/17 21:00	04/28/17 09:00
180-65736-8	SUPE-TB-01-042617	Water	04/26/17 00:00	04/28/17 09:00
180-65736-9	SUPE-W-30C-042617	Water	04/26/17 16:38	04/28/17 09:00
180-65736-10	SUPE-EB-01-042617	Water	04/26/17 17:15	04/28/17 09:00
180-65736-11	SUPE-W-06A-042717	Water	04/27/17 10:04	04/28/17 09:00
180-65736-12	SUPE-W-06C-042717	Water	04/27/17 12:43	04/28/17 09:00
180-65736-13	SUPE-W-12A-042717	Water	04/27/17 15:05	04/28/17 09:00
180-65736-14	SUPE-W-18D-042617	Water	04/26/17 16:42	04/28/17 09:00

Method Summary

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

TestAmerica Job ID: 180-65736-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
8290	Dioxins and Furans (HRGC/HRMS)	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 CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-TB-02-042717
Lab Sample ID: 180-65736-1
Date Collected: 04/27/17 09:10
Matrix: Water
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 14:43	HMB	TAL CAN
	Instrument ID: A3UX16									

Client Sample ID: SUPE-W-28C-042717
Lab Sample ID: 180-65736-2
Date Collected: 04/27/17 09:10
Matrix: Water
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 15:06	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 20:22	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			962 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10968	05/03/17 02:56	LKM	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-12CR-042717
Lab Sample ID: 180-65736-3
Date Collected: 04/27/17 11:12
Matrix: Water
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 15:29	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 20:50	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			1047.5 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10968	05/03/17 03:57	LKM	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-30A-042717
Lab Sample ID: 180-65736-4
Date Collected: 04/27/17 12:43
Matrix: Water
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 15:52	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 21:18	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			994.3 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX

Client Sample ID: SUPE-W-30A-042717

Lab Sample ID: 180-65736-4

Date Collected: 04/27/17 12:43

Matrix: Water

Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8290		1			10968	05/03/17 04:58	LKM	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-10AR2-042717

Lab Sample ID: 180-65736-5

Date Collected: 04/27/17 14:51

Matrix: Water

Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 16:16	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			250 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 21:46	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			1040 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10968	05/03/17 05:59	LKM	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-EB-02-042717

Lab Sample ID: 180-65736-6

Date Collected: 04/27/17 15:56

Matrix: Water

Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 16:39	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			250 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 22:13	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			981.9 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10968	05/03/17 07:00	LKM	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-M-99A-042717

Lab Sample ID: 180-65736-7

Date Collected: 04/27/17 21:00

Matrix: Water

Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 17:02	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			270 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 22:41	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			974.5 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX

Lab Chronicle

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-M-99A-042717

Lab Sample ID: 180-65736-7
Matrix: Water
Date Collected: 04/27/17 21:00
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8290		1			10980	05/03/17 11:58	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-TB-01-042617

Lab Sample ID: 180-65736-8
Matrix: Water
Date Collected: 04/26/17 00:00
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 17:24	HMB	TAL CAN
	Instrument ID: A3UX16									

Client Sample ID: SUPE-W-30C-042617

Lab Sample ID: 180-65736-9
Matrix: Water
Date Collected: 04/26/17 16:38
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 17:48	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210043	05/03/17 08:33	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210526	05/08/17 18:45	VVP	TAL PIT
	Instrument ID: CH732									
Total/NA	Prep	8290			1040.9 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10980	05/03/17 13:05	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-EB-01-042617

Lab Sample ID: 180-65736-10
Matrix: Water
Date Collected: 04/26/17 17:15
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 18:11	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			250 mL	0.25 mL	210043	05/03/17 08:33	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210526	05/08/17 19:12	VVP	TAL PIT
	Instrument ID: CH732									
Total/NA	Prep	8290			1036.6 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10980	05/03/17 14:06	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-06A-042717

Lab Sample ID: 180-65736-11
Matrix: Water
Date Collected: 04/27/17 10:04
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 18:33	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 23:09	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			1048.4 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10980	05/03/17 15:07	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-06C-042717

Lab Sample ID: 180-65736-12
Matrix: Water
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 18:57	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			260 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/06/17 23:37	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			1043.1 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10980	05/03/17 16:08	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-12A-042717

Lab Sample ID: 180-65736-13
Matrix: Water
Date Collected: 04/27/17 15:05
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277838	05/06/17 19:20	HMB	TAL CAN
	Instrument ID: A3UX16									
Total/NA	Prep	3520C			270 mL	0.25 mL	210177	05/04/17 09:19	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210324	05/07/17 00:05	VVP	TAL PIT
	Instrument ID: CH733									
Total/NA	Prep	8290			1041.6 mL	20 uL	10937	05/01/17 15:01	SSS	TAL KNX
Total/NA	Analysis	8290		1			10980	05/03/17 17:09	MSD	TAL KNX
	Instrument ID: D2A									

Client Sample ID: SUPE-W-18D-042617

Lab Sample ID: 180-65736-14
Matrix: Water
Date Collected: 04/26/17 16:42
Date Received: 04/28/17 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			270 mL	0.25 mL	210043	05/03/17 08:33	BJT	TAL PIT

Client Sample ID: SUPE-W-18D-042617
Date Collected: 04/26/17 16:42
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	210526	05/08/17 19:39	VVP	TAL PIT
	Instrument ID: CH732									

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL CAN

Batch Type: Analysis

HMB = Heather Bosworth

Lab: TAL KNX

Batch Type: Prep

SSS = Samuel Stockton

Batch Type: Analysis

LKM = Linda McWhirter

MSD = Melissa Davidson

Lab: TAL PIT

Batch Type: Prep

BJT = Bill Trout

Batch Type: Analysis

VVP = Vincent Piccolino

Client Sample ID: SUPE-TB-02-042717

Lab Sample ID: 180-65736-1

Date Collected: 04/27/17 09:10

Matrix: Water

Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 14:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 14:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 14:43	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 14:43	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 14:43	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 14:43	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 14:43	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 14:43	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 14:43	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 14:43	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 14:43	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 14:43	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 14:43	1
Toluene	**0.39**	**J**	1.0	0.23	ug/L			05/06/17 14:43	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*		*05/06/17 14:43*	*1*
4-Bromofluorobenzene (Surr)	*93*		*69 - 120*		*05/06/17 14:43*	*1*
Dibromofluoromethane (Surr)	*87*		*69 - 124*		*05/06/17 14:43*	*1*
Toluene-d8 (Surr)	*104*		*73 - 120*		*05/06/17 14:43*	*1*

Client Sample ID: SUPE-W-28C-042717

Lab Sample ID: 180-65736-2

Date Collected: 04/27/17 09:10

Matrix: Water

Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 15:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 15:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 15:06	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 15:06	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 15:06	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 15:06	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 15:06	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 15:06	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 15:06	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 15:06	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 15:06	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 15:06	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 15:06	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 15:06	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 138*		*05/06/17 15:06*	*1*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*		*05/06/17 15:06*	*1*
Dibromofluoromethane (Surr)	*83*		*69 - 124*		*05/06/17 15:06*	*1*
Toluene-d8 (Surr)	*101*		*73 - 120*		*05/06/17 15:06*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-28C-042717
Date Collected: 04/27/17 09:10
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 20:22	1
Acenaphthylene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 20:22	1
Anthracene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzo[a]anthracene	ND		0.18	0.035	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzo[a]pyrene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzo[b]fluoranthene	ND	*	0.18	0.047	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzo[k]fluoranthene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 20:22	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:22	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:22	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 20:22	1
Bis(2-ethylhexyl) phthalate	**2.0**		1.9	0.42	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:22	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/04/17 09:19	05/06/17 20:22	1
Chrysene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:22	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 20:22	1
Dibenzofuran	ND		0.96	0.093	ug/L		05/04/17 09:19	05/06/17 20:22	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 20:22	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/04/17 09:19	05/06/17 20:22	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:22	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/04/17 09:19	05/06/17 20:22	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:22	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 20:22	1
Di-n-butyl phthalate	ND		0.96	0.23	ug/L		05/04/17 09:19	05/06/17 20:22	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:22	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 20:22	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 20:22	1
Fluorene	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 20:22	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/04/17 09:19	05/06/17 20:22	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/04/17 09:19	05/06/17 20:22	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:22	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:22	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/04/17 09:19	05/06/17 20:22	1
Isophorone	ND		0.96	0.071	ug/L		05/04/17 09:19	05/06/17 20:22	1
1-Methylnaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 20:22	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/04/17 09:19	05/06/17 20:22	1

Client Sample ID: SUPE-W-28C-042717
Date Collected: 04/27/17 09:10
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		4.8	0.77	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/04/17 09:19	05/06/17 20:22	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 20:22	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:22	1
4-Nitrophenol	ND	*	4.8	0.77	ug/L		05/04/17 09:19	05/06/17 20:22	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/04/17 09:19	05/06/17 20:22	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 20:22	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/04/17 09:19	05/06/17 20:22	1
Phenanthrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 20:22	1
Phenol	ND		0.96	0.053	ug/L		05/04/17 09:19	05/06/17 20:22	1
Pyrene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:22	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 20:22	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzoic acid	**1.8**	**J**	4.8	1.6	ug/L		05/04/17 09:19	05/06/17 20:22	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/04/17 09:19	05/06/17 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*24 - 100*	*05/04/17 09:19*	*05/06/17 20:22*	*1*
2-Fluorophenol (Surr)	*51*		*20 - 100*	*05/04/17 09:19*	*05/06/17 20:22*	*1*
Nitrobenzene-d5 (Surr)	*68*		*25 - 105*	*05/04/17 09:19*	*05/06/17 20:22*	*1*
Phenol-d5 (Surr)	*56*		*21 - 100*	*05/04/17 09:19*	*05/06/17 20:22*	*1*
Terphenyl-d14 (Surr)	*62*		*20 - 124*	*05/04/17 09:19*	*05/06/17 20:22*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*22 - 118*	*05/04/17 09:19*	*05/06/17 20:22*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.47	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total TCDD	ND		10	0.47	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,7,8-PeCDD	ND		52	0.86	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total PeCDD	ND		52	0.86	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,4,7,8-HxCDD	**3.5**	**J B**	52	0.29	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,6,7,8-HxCDD	**2.3**	**J B**	52	0.30	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,7,8,9-HxCDD	**3.9**	**J B**	52	0.28	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total HxCDD	**11**	**J B q**	52	0.29	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,4,6,7,8-HpCDD	**7.2**	**J B**	52	0.44	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total HpCDD	**12**	**J B**	52	0.44	pg/L		05/01/17 15:01	05/03/17 02:56	1
OCDD	**35**	**J B**	100	0.26	pg/L		05/01/17 15:01	05/03/17 02:56	1
2,3,7,8-TCDF	ND		10	0.45	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total TCDF	ND		10	0.45	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,7,8-PeCDF	ND		52	0.62	pg/L		05/01/17 15:01	05/03/17 02:56	1
2,3,4,7,8-PeCDF	**2.0**	**J B q**	52	0.57	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total PeCDF	**2.8**	**J B q**	52	0.59	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,4,7,8-HxCDF	**3.4**	**J B**	52	0.38	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,6,7,8-HxCDF	**2.6**	**J B q**	52	0.35	pg/L		05/01/17 15:01	05/03/17 02:56	1
2,3,4,6,7,8-HxCDF	**3.8**	**J B**	52	0.40	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,7,8,9-HxCDF	**3.6**	**J B**	52	0.47	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total HxCDF	**16**	**J B q**	52	0.40	pg/L		05/01/17 15:01	05/03/17 02:56	1

Client Sample ID: SUPE-W-28C-042717

Lab Sample ID: 180-65736-2
Matrix: Water
Date Collected: 04/27/17 09:10
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	10	J B	52	0.34	pg/L		05/01/17 15:01	05/03/17 02:56	1
1,2,3,4,7,8,9-HpCDF	4.5	J B	52	0.47	pg/L		05/01/17 15:01	05/03/17 02:56	1
Total HpCDF	16	J B	52	0.41	pg/L		05/01/17 15:01	05/03/17 02:56	1
OCDF	25	J B	100	0.12	pg/L		05/01/17 15:01	05/03/17 02:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,7,8-PeCDD	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,4,7,8-HxCDD	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-OCDD	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-2,3,7,8-TCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,7,8-PeCDF	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-2,3,4,7,8-PeCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,4,7,8-HxCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,6,7,8-HxCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-2,3,4,6,7,8-HxCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,7,8,9-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*
13C-OCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 02:56*	*1*

Client Sample ID: SUPE-W-12CR-042717

Lab Sample ID: 180-65736-3
Matrix: Water
Date Collected: 04/27/17 11:12
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 15:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 15:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 15:29	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 15:29	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 15:29	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 15:29	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 15:29	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 15:29	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 15:29	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 15:29	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 15:29	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 15:29	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 15:29	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 15:29	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*		*05/06/17 15:29*	*1*
4-Bromofluorobenzene (Surr)	*91*		*69 - 120*		*05/06/17 15:29*	*1*
Dibromofluoromethane (Surr)	*84*		*69 - 124*		*05/06/17 15:29*	*1*
Toluene-d8 (Surr)	*101*		*73 - 120*		*05/06/17 15:29*	*1*

Client Sample ID: SUPE-W-12CR-042717
Date Collected: 04/27/17 11:12
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 20:50	1
Acenaphthylene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 20:50	1
Anthracene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzo[a]anthracene	ND		0.18	0.035	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzo[a]pyrene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzo[b]fluoranthene	ND	*	0.18	0.047	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzo[k]fluoranthene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 20:50	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:50	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:50	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 20:50	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.42	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:50	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/04/17 09:19	05/06/17 20:50	1
Chrysene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:50	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 20:50	1
Dibenzofuran	ND		0.96	0.093	ug/L		05/04/17 09:19	05/06/17 20:50	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 20:50	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/04/17 09:19	05/06/17 20:50	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:50	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/04/17 09:19	05/06/17 20:50	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 20:50	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 20:50	1
Di-n-butyl phthalate	ND		0.96	0.23	ug/L		05/04/17 09:19	05/06/17 20:50	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:50	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 20:50	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 20:50	1
Fluorene	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 20:50	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/04/17 09:19	05/06/17 20:50	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/04/17 09:19	05/06/17 20:50	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:50	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 20:50	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/04/17 09:19	05/06/17 20:50	1
Isophorone	ND		0.96	0.071	ug/L		05/04/17 09:19	05/06/17 20:50	1
1-Methylnaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 20:50	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/04/17 09:19	05/06/17 20:50	1

Client Sample ID: SUPE-W-12CR-042717
Date Collected: 04/27/17 11:12
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		4.8	0.77	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/04/17 09:19	05/06/17 20:50	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 20:50	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:50	1
4-Nitrophenol	ND	*	4.8	0.77	ug/L		05/04/17 09:19	05/06/17 20:50	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/04/17 09:19	05/06/17 20:50	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 20:50	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/04/17 09:19	05/06/17 20:50	1
Phenanthrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 20:50	1
Phenol	ND		0.96	0.053	ug/L		05/04/17 09:19	05/06/17 20:50	1
Pyrene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,3,4,6-Tetrachlorophenol	**0.19**	**J**	0.96	0.10	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 20:50	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 20:50	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzoic acid	ND		4.8	1.6	ug/L		05/04/17 09:19	05/06/17 20:50	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/04/17 09:19	05/06/17 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*24 - 100*	*05/04/17 09:19*	*05/06/17 20:50*	*1*
2-Fluorophenol (Surr)	*59*		*20 - 100*	*05/04/17 09:19*	*05/06/17 20:50*	*1*
Nitrobenzene-d5 (Surr)	*75*		*25 - 105*	*05/04/17 09:19*	*05/06/17 20:50*	*1*
Phenol-d5 (Surr)	*63*		*21 - 100*	*05/04/17 09:19*	*05/06/17 20:50*	*1*
Terphenyl-d14 (Surr)	*56*		*20 - 124*	*05/04/17 09:19*	*05/06/17 20:50*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*22 - 118*	*05/04/17 09:19*	*05/06/17 20:50*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.5	0.48	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total TCDD	ND		9.5	0.48	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,7,8-PeCDD	**0.59**	**J B**	48	0.13	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total PeCDD	**0.59**	**J B**	48	0.13	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,4,7,8-HxCDD	**1.3**	**J B**	48	0.13	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,6,7,8-HxCDD	**1.3**	**J B**	48	0.14	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,7,8,9-HxCDD	**1.4**	**J B**	48	0.12	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total HxCDD	**4.6**	**J B q**	48	0.13	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,4,6,7,8-HpCDD	**3.0**	**J B q**	48	0.58	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total HpCDD	**7.0**	**J B q**	48	0.58	pg/L		05/01/17 15:01	05/03/17 03:57	1
OCDD	**21**	**J B**	95	0.11	pg/L		05/01/17 15:01	05/03/17 03:57	1
2,3,7,8-TCDF	ND		9.5	0.38	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total TCDF	ND		9.5	0.38	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,7,8-PeCDF	ND		48	0.48	pg/L		05/01/17 15:01	05/03/17 03:57	1
2,3,4,7,8-PeCDF	ND		48	0.44	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total PeCDF	ND		48	0.48	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,4,7,8-HxCDF	**1.3**	**J B**	48	0.18	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,6,7,8-HxCDF	**1.1**	**J B q**	48	0.18	pg/L		05/01/17 15:01	05/03/17 03:57	1
2,3,4,6,7,8-HxCDF	**1.6**	**J B**	48	0.18	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,7,8,9-HxCDF	**1.5**	**J B**	48	0.23	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total HxCDF	**6.8**	**J B q**	48	0.19	pg/L		05/01/17 15:01	05/03/17 03:57	1

Client Sample ID: SUPE-W-12CR-042717

Lab Sample ID: 180-65736-3
Matrix: Water
Date Collected: 04/27/17 11:12
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	2.5	J B q	48	0.16	pg/L		05/01/17 15:01	05/03/17 03:57	1
1,2,3,4,7,8,9-HpCDF	2.6	J B q	48	0.23	pg/L		05/01/17 15:01	05/03/17 03:57	1
Total HpCDF	5.7	J B q	48	0.19	pg/L		05/01/17 15:01	05/03/17 03:57	1
OCDF	8.1	J B	95	0.092	pg/L		05/01/17 15:01	05/03/17 03:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,7,8-PeCDD	*95*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,4,7,8-HxCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,6,7,8-HxCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*92*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-OCDD	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,7,8-PeCDF	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-2,3,4,7,8-PeCDF	*92*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,4,7,8-HxCDF	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,6,7,8-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-2,3,4,6,7,8-HxCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,7,8,9-HxCDF	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*
13C-OCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 03:57*	*1*

Client Sample ID: SUPE-W-30A-042717

Lab Sample ID: 180-65736-4
Matrix: Water
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 15:52	1
1,2,4-Trimethylbenzene	3.9		1.0	0.24	ug/L			05/06/17 15:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 15:52	1
Benzene	5.6		1.0	0.28	ug/L			05/06/17 15:52	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 15:52	1
Ethylbenzene	18		1.0	0.26	ug/L			05/06/17 15:52	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 15:52	1
m-Xylene & p-Xylene	1.6	J	2.0	0.24	ug/L			05/06/17 15:52	1
Naphthalene	14		1.0	0.25	ug/L			05/06/17 15:52	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 15:52	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 15:52	1
o-Xylene	3.4		1.0	0.28	ug/L			05/06/17 15:52	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 15:52	1
Toluene	0.43	J	1.0	0.23	ug/L			05/06/17 15:52	1
Xylenes, Total	5.0		2.0	0.24	ug/L			05/06/17 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*		*05/06/17 15:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*69 - 120*		*05/06/17 15:52*	*1*
Dibromofluoromethane (Surr)	*87*		*69 - 124*		*05/06/17 15:52*	*1*
Toluene-d8 (Surr)	*106*		*73 - 120*		*05/06/17 15:52*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-30A-042717
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**12**		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 21:18	1
Acenaphthylene	**0.32**		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 21:18	1
Anthracene	**0.47**		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzo[a]anthracene	**0.50**		0.18	0.035	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzo[a]pyrene	**0.18**		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzo[b]fluoranthene	**0.29**	*	0.18	0.047	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzo[k]fluoranthene	**0.16**	**J**	0.18	0.029	ug/L		05/04/17 09:19	05/06/17 21:18	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 21:18	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 21:18	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 21:18	1
Bis(2-ethylhexyl) phthalate	**2.9**		1.9	0.42	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 21:18	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/04/17 09:19	05/06/17 21:18	1
Chrysene	**0.50**		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 21:18	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 21:18	1
Dibenzofuran	**3.5**		0.96	0.093	ug/L		05/04/17 09:19	05/06/17 21:18	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 21:18	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/04/17 09:19	05/06/17 21:18	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 21:18	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/04/17 09:19	05/06/17 21:18	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 21:18	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 21:18	1
Di-n-butyl phthalate	ND		0.96	0.23	ug/L		05/04/17 09:19	05/06/17 21:18	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 21:18	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 21:18	1
Fluoranthene	**3.1**		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 21:18	1
Fluorene	**2.7**		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 21:18	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/04/17 09:19	05/06/17 21:18	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/04/17 09:19	05/06/17 21:18	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 21:18	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 21:18	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/04/17 09:19	05/06/17 21:18	1
Isophorone	ND		0.96	0.071	ug/L		05/04/17 09:19	05/06/17 21:18	1
1-Methylnaphthalene	**1.9**		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 21:18	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/04/17 09:19	05/06/17 21:18	1

Client Sample ID: SUPE-W-30A-042717
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		4.8	0.77	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/04/17 09:19	05/06/17 21:18	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 21:18	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 21:18	1
4-Nitrophenol	ND	*	4.8	0.77	ug/L		05/04/17 09:19	05/06/17 21:18	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/04/17 09:19	05/06/17 21:18	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 21:18	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/04/17 09:19	05/06/17 21:18	1
Phenanthrene	**1.3**		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 21:18	1
Phenol	**0.39**	**J**	0.96	0.053	ug/L		05/04/17 09:19	05/06/17 21:18	1
Pyrene	**2.2**		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 21:18	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 21:18	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzoic acid	ND		4.8	1.6	ug/L		05/04/17 09:19	05/06/17 21:18	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/04/17 09:19	05/06/17 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*24 - 100*	*05/04/17 09:19*	*05/06/17 21:18*	*1*
2-Fluorophenol (Surr)	*67*		*20 - 100*	*05/04/17 09:19*	*05/06/17 21:18*	*1*
Nitrobenzene-d5 (Surr)	*86*		*25 - 105*	*05/04/17 09:19*	*05/06/17 21:18*	*1*
Phenol-d5 (Surr)	*71*		*21 - 100*	*05/04/17 09:19*	*05/06/17 21:18*	*1*
Terphenyl-d14 (Surr)	*53*		*20 - 124*	*05/04/17 09:19*	*05/06/17 21:18*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*22 - 118*	*05/04/17 09:19*	*05/06/17 21:18*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.49	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total TCDD	ND		10	0.49	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,7,8-PeCDD	**1.1**	**J B q**	50	0.29	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total PeCDD	**1.6**	**J B q**	50	0.29	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,4,7,8-HxCDD	**2.7**	**J B**	50	0.53	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,6,7,8-HxCDD	**23**	**J B**	50	0.53	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,7,8,9-HxCDD	**5.9**	**J CI B**	50	0.49	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total HxCDD	**88**	**B**	50	0.52	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,4,6,7,8-HpCDD	**590**	**B**	50	0.39	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total HpCDD	**1200**	**B**	50	0.39	pg/L		05/01/17 15:01	05/03/17 04:58	1
OCDD	**7200**	**B**	100	0.16	pg/L		05/01/17 15:01	05/03/17 04:58	1
2,3,7,8-TCDF	**0.55**	**J q**	10	0.36	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total TCDF	**110**	**I q**	10	0.36	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,7,8-PeCDF	**2.3**	**J q**	50	0.43	pg/L		05/01/17 15:01	05/03/17 04:58	1
2,3,4,7,8-PeCDF	**4.0**	**J B**	50	0.43	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total PeCDF	**310**	**I B q**	50	0.43	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,4,7,8-HxCDF	**29**	**J B**	50	3.4	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,6,7,8-HxCDF	**37**	**J I B**	50	3.5	pg/L		05/01/17 15:01	05/03/17 04:58	1
2,3,4,6,7,8-HxCDF	ND		50	3.6	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,7,8,9-HxCDF	ND		50	4.4	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total HxCDF	**750**	**I B**	50	3.7	pg/L		05/01/17 15:01	05/03/17 04:58	1

Client Sample ID: SUPE-W-30A-042717

Lab Sample ID: 180-65736-4
Matrix: Water
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	220	B	50	0.70	pg/L		05/01/17 15:01	05/03/17 04:58	1
1,2,3,4,7,8,9-HpCDF	22	J B	50	0.98	pg/L		05/01/17 15:01	05/03/17 04:58	1
Total HpCDF	850	B	50	0.84	pg/L		05/01/17 15:01	05/03/17 04:58	1
OCDF	610	B	100	0.83	pg/L		05/01/17 15:01	05/03/17 04:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,7,8-PeCDD	*95*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,4,7,8-HxCDD	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-OCDD	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-2,3,7,8-TCDF	*92*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,7,8-PeCDF	*93*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-2,3,4,7,8-PeCDF	*91*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,4,7,8-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,6,7,8-HxCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-2,3,4,6,7,8-HxCDF	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,7,8,9-HxCDF	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*
13C-OCDF	*67*		*40 - 135*	*05/01/17 15:01*	*05/03/17 04:58*	*1*

Client Sample ID: SUPE-W-10AR2-042717

Lab Sample ID: 180-65736-5
Matrix: Water
Date Collected: 04/27/17 14:51
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 16:16	1
1,2,4-Trimethylbenzene	4.1		1.0	0.24	ug/L			05/06/17 16:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 16:16	1
Benzene	8.6		1.0	0.28	ug/L			05/06/17 16:16	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 16:16	1
Ethylbenzene	19		1.0	0.26	ug/L			05/06/17 16:16	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 16:16	1
m-Xylene & p-Xylene	1.6	J	2.0	0.24	ug/L			05/06/17 16:16	1
Naphthalene	2.0		1.0	0.25	ug/L			05/06/17 16:16	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 16:16	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 16:16	1
o-Xylene	11		1.0	0.28	ug/L			05/06/17 16:16	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 16:16	1
Toluene	0.94	J	1.0	0.23	ug/L			05/06/17 16:16	1
Xylenes, Total	13		2.0	0.24	ug/L			05/06/17 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*		*05/06/17 16:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*69 - 120*		*05/06/17 16:16*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 124*		*05/06/17 16:16*	*1*
Toluene-d8 (Surr)	*105*		*73 - 120*		*05/06/17 16:16*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-10AR2-042717
Date Collected: 04/27/17 14:51
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**23**		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 21:46	1
Acenaphthylene	**0.46**		0.19	0.022	ug/L		05/04/17 09:19	05/06/17 21:46	1
Anthracene	**0.17**	**J**	0.19	0.019	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzo[a]anthracene	ND		0.19	0.037	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzo[b]fluoranthene	ND	*	0.19	0.049	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzo[g,h,i]perylene	ND		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzo[k]fluoranthene	ND		0.19	0.030	ug/L		05/04/17 09:19	05/06/17 21:46	1
Bis(2-chloroethoxy)methane	ND		1.0	0.13	ug/L		05/04/17 09:19	05/06/17 21:46	1
Bis(2-chloroethyl)ether	ND		0.19	0.032	ug/L		05/04/17 09:19	05/06/17 21:46	1
bis(chloroisopropyl) ether	ND		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 21:46	1
Bis(2-ethylhexyl) phthalate	**0.50**	**J**	2.0	0.44	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 21:46	1
Butyl benzyl phthalate	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Chloroaniline	ND		1.0	0.29	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Chloro-3-methylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Chloronaphthalene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Chlorophenol	ND		1.0	0.23	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Chlorophenyl phenyl ether	ND		1.0	0.080	ug/L		05/04/17 09:19	05/06/17 21:46	1
Chrysene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 21:46	1
Dibenz(a,h)anthracene	ND		0.19	0.027	ug/L		05/04/17 09:19	05/06/17 21:46	1
Dibenzofuran	**5.9**		1.0	0.097	ug/L		05/04/17 09:19	05/06/17 21:46	1
1,2-Dichlorobenzene	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 21:46	1
1,3-Dichlorobenzene	ND		1.0	0.075	ug/L		05/04/17 09:19	05/06/17 21:46	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L		05/04/17 09:19	05/06/17 21:46	1
3,3'-Dichlorobenzidine	ND		1.0	0.15	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4-Dichlorophenol	ND		0.19	0.067	ug/L		05/04/17 09:19	05/06/17 21:46	1
Diethyl phthalate	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 21:46	1
Dimethyl phthalate	ND		1.0	0.18	ug/L		05/04/17 09:19	05/06/17 21:46	1
Di-n-butyl phthalate	**0.24**	**J**	1.0	0.24	ug/L		05/04/17 09:19	05/06/17 21:46	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.6	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4-Dinitrophenol	ND		5.0	2.5	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4-Dinitrotoluene	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,6-Dinitrotoluene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 21:46	1
Di-n-octyl phthalate	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 21:46	1
Fluoranthene	**0.79**		0.19	0.021	ug/L		05/04/17 09:19	05/06/17 21:46	1
Fluorene	**5.9**		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 21:46	1
Hexachlorobenzene	ND		0.19	0.061	ug/L		05/04/17 09:19	05/06/17 21:46	1
Hexachlorobutadiene	ND		0.19	0.094	ug/L		05/04/17 09:19	05/06/17 21:46	1
Hexachlorocyclopentadiene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 21:46	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 21:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.043	ug/L		05/04/17 09:19	05/06/17 21:46	1
Isophorone	ND		1.0	0.074	ug/L		05/04/17 09:19	05/06/17 21:46	1
1-Methylnaphthalene	**7.1**		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Methylphenol	ND		1.0	0.19	ug/L		05/04/17 09:19	05/06/17 21:46	1
Methylphenol, 3 & 4	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Nitroaniline	ND		5.0	0.67	ug/L		05/04/17 09:19	05/06/17 21:46	1

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-10AR2-042717
Date Collected: 04/27/17 14:51
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		5.0	0.81	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Nitroaniline	ND		5.0	0.77	ug/L		05/04/17 09:19	05/06/17 21:46	1
Nitrobenzene	ND		2.0	0.15	ug/L		05/04/17 09:19	05/06/17 21:46	1
2-Nitrophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 21:46	1
4-Nitrophenol	ND	*	5.0	0.80	ug/L		05/04/17 09:19	05/06/17 21:46	1
N-Nitrosodi-n-propylamine	ND		0.19	0.050	ug/L		05/04/17 09:19	05/06/17 21:46	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 21:46	1
Pentachlorophenol	ND		1.0	0.50	ug/L		05/04/17 09:19	05/06/17 21:46	1
Phenanthrene	**0.51**		0.19	0.042	ug/L		05/04/17 09:19	05/06/17 21:46	1
Phenol	**0.51**	**J**	1.0	0.055	ug/L		05/04/17 09:19	05/06/17 21:46	1
Pyrene	**0.41**		0.19	0.023	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,3,5,6-Tetrachlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 21:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.085	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 21:46	1
2,4,6-Trichlorophenol	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzoic acid	ND		5.0	1.6	ug/L		05/04/17 09:19	05/06/17 21:46	1
Benzyl alcohol	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*24 - 100*	*05/04/17 09:19*	*05/06/17 21:46*	*1*
2-Fluorophenol (Surr)	*77*		*20 - 100*	*05/04/17 09:19*	*05/06/17 21:46*	*1*
Nitrobenzene-d5 (Surr)	*104*		*25 - 105*	*05/04/17 09:19*	*05/06/17 21:46*	*1*
Phenol-d5 (Surr)	*81*		*21 - 100*	*05/04/17 09:19*	*05/06/17 21:46*	*1*
Terphenyl-d14 (Surr)	*60*		*20 - 124*	*05/04/17 09:19*	*05/06/17 21:46*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*22 - 118*	*05/04/17 09:19*	*05/06/17 21:46*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.65	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total TCDD	ND		9.6	0.65	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,7,8-PeCDD	ND		48	0.30	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total PeCDD	ND		48	0.30	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,4,7,8-HxCDD	**1.2**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,6,7,8-HxCDD	**2.6**	**J B**	48	0.22	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,7,8,9-HxCDD	**1.5**	**J B q**	48	0.20	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total HxCDD	**9.5**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,4,6,7,8-HpCDD	**37**	**J B**	48	0.63	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total HpCDD	**74**	**B**	48	0.63	pg/L		05/01/17 15:01	05/03/17 05:59	1
OCDD	**430**	**B**	96	0.14	pg/L		05/01/17 15:01	05/03/17 05:59	1
2,3,7,8-TCDF	ND		9.6	0.52	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total TCDF	**4.0**	**J**	9.6	0.52	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,7,8-PeCDF	**0.57**	**J q**	48	0.31	pg/L		05/01/17 15:01	05/03/17 05:59	1
2,3,4,7,8-PeCDF	ND		48	0.30	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total PeCDF	**12**	**J I B q**	48	0.30	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,4,7,8-HxCDF	**3.0**	**J B**	48	0.31	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,6,7,8-HxCDF	**3.3**	**J I B**	48	0.31	pg/L		05/01/17 15:01	05/03/17 05:59	1
2,3,4,6,7,8-HxCDF	**1.7**	**J B q**	48	0.32	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,7,8,9-HxCDF	**1.7**	**J B**	48	0.39	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total HxCDF	**42**	**J I B q**	48	0.33	pg/L		05/01/17 15:01	05/03/17 05:59	1

Client Sample ID: SUPE-W-10AR2-042717

Lab Sample ID: 180-65736-5
Matrix: Water
Date Collected: 04/27/17 14:51
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	14	J B	48	0.38	pg/L		05/01/17 15:01	05/03/17 05:59	1
1,2,3,4,7,8,9-HpCDF	2.8	J B q	48	0.51	pg/L		05/01/17 15:01	05/03/17 05:59	1
Total HpCDF	48	B q	48	0.45	pg/L		05/01/17 15:01	05/03/17 05:59	1
OCDF	39	J B	96	0.16	pg/L		05/01/17 15:01	05/03/17 05:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,7,8-PeCDD	*93*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,4,7,8-HxCDD	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,6,7,8-HxCDD	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-OCDD	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,7,8-PeCDF	*91*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-2,3,4,7,8-PeCDF	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,4,7,8-HxCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,6,7,8-HxCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-2,3,4,6,7,8-HxCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,7,8,9-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*
13C-OCDF	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 05:59*	*1*

Client Sample ID: SUPE-EB-02-042717

Lab Sample ID: 180-65736-6
Matrix: Water
Date Collected: 04/27/17 15:56
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 16:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 16:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 16:39	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 16:39	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 16:39	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 16:39	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 16:39	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 16:39	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 16:39	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 16:39	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 16:39	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 16:39	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 16:39	1
Toluene	0.40	J	1.0	0.23	ug/L			05/06/17 16:39	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 138*		*05/06/17 16:39*	*1*
4-Bromofluorobenzene (Surr)	*94*		*69 - 120*		*05/06/17 16:39*	*1*
Dibromofluoromethane (Surr)	*83*		*69 - 124*		*05/06/17 16:39*	*1*
Toluene-d8 (Surr)	*104*		*73 - 120*		*05/06/17 16:39*	*1*

Client Sample ID: SUPE-EB-02-042717
Date Collected: 04/27/17 15:56
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 22:13	1
Acenaphthylene	ND		0.19	0.022	ug/L		05/04/17 09:19	05/06/17 22:13	1
Anthracene	ND		0.19	0.019	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzo[a]anthracene	ND		0.19	0.037	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzo[b]fluoranthene	ND	*	0.19	0.049	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzo[g,h,i]perylene	ND		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzo[k]fluoranthene	ND		0.19	0.030	ug/L		05/04/17 09:19	05/06/17 22:13	1
Bis(2-chloroethoxy)methane	ND		1.0	0.13	ug/L		05/04/17 09:19	05/06/17 22:13	1
Bis(2-chloroethyl)ether	ND		0.19	0.032	ug/L		05/04/17 09:19	05/06/17 22:13	1
bis(chloroisopropyl) ether	ND		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 22:13	1
Bis(2-ethylhexyl) phthalate	**1.9**	**J**	2.0	0.44	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 22:13	1
Butyl benzyl phthalate	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Chloroaniline	ND		1.0	0.29	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Chloro-3-methylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Chloronaphthalene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Chlorophenol	ND		1.0	0.23	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Chlorophenyl phenyl ether	ND		1.0	0.080	ug/L		05/04/17 09:19	05/06/17 22:13	1
Chrysene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 22:13	1
Dibenz(a,h)anthracene	ND		0.19	0.027	ug/L		05/04/17 09:19	05/06/17 22:13	1
Dibenzofuran	ND		1.0	0.097	ug/L		05/04/17 09:19	05/06/17 22:13	1
1,2-Dichlorobenzene	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 22:13	1
1,3-Dichlorobenzene	ND		1.0	0.075	ug/L		05/04/17 09:19	05/06/17 22:13	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L		05/04/17 09:19	05/06/17 22:13	1
3,3'-Dichlorobenzidine	ND		1.0	0.15	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4-Dichlorophenol	ND		0.19	0.067	ug/L		05/04/17 09:19	05/06/17 22:13	1
Diethyl phthalate	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 22:13	1
Dimethyl phthalate	ND		1.0	0.18	ug/L		05/04/17 09:19	05/06/17 22:13	1
Di-n-butyl phthalate	**0.36**	**J**	1.0	0.24	ug/L		05/04/17 09:19	05/06/17 22:13	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.6	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4-Dinitrophenol	ND		5.0	2.5	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4-Dinitrotoluene	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,6-Dinitrotoluene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 22:13	1
Di-n-octyl phthalate	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 22:13	1
Fluoranthene	ND		0.19	0.021	ug/L		05/04/17 09:19	05/06/17 22:13	1
Fluorene	ND		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 22:13	1
Hexachlorobenzene	ND		0.19	0.061	ug/L		05/04/17 09:19	05/06/17 22:13	1
Hexachlorobutadiene	ND		0.19	0.094	ug/L		05/04/17 09:19	05/06/17 22:13	1
Hexachlorocyclopentadiene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 22:13	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 22:13	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.043	ug/L		05/04/17 09:19	05/06/17 22:13	1
Isophorone	ND		1.0	0.074	ug/L		05/04/17 09:19	05/06/17 22:13	1
1-Methylnaphthalene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Methylphenol	ND		1.0	0.19	ug/L		05/04/17 09:19	05/06/17 22:13	1
Methylphenol, 3 & 4	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Nitroaniline	ND		5.0	0.67	ug/L		05/04/17 09:19	05/06/17 22:13	1

Client Sample ID: SUPE-EB-02-042717
Date Collected: 04/27/17 15:56
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		5.0	0.81	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Nitroaniline	ND		5.0	0.77	ug/L		05/04/17 09:19	05/06/17 22:13	1
Nitrobenzene	ND		2.0	0.15	ug/L		05/04/17 09:19	05/06/17 22:13	1
2-Nitrophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 22:13	1
4-Nitrophenol	ND	*	5.0	0.80	ug/L		05/04/17 09:19	05/06/17 22:13	1
N-Nitrosodi-n-propylamine	ND		0.19	0.050	ug/L		05/04/17 09:19	05/06/17 22:13	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 22:13	1
Pentachlorophenol	ND		1.0	0.50	ug/L		05/04/17 09:19	05/06/17 22:13	1
Phenanthrene	ND		0.19	0.042	ug/L		05/04/17 09:19	05/06/17 22:13	1
Phenol	ND		1.0	0.055	ug/L		05/04/17 09:19	05/06/17 22:13	1
Pyrene	ND		0.19	0.023	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,3,5,6-Tetrachlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 22:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.085	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 22:13	1
2,4,6-Trichlorophenol	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzoic acid	**1.9**	**J**	5.0	1.6	ug/L		05/04/17 09:19	05/06/17 22:13	1
Benzyl alcohol	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*24 - 100*	*05/04/17 09:19*	*05/06/17 22:13*	*1*
2-Fluorophenol (Surr)	*69*		*20 - 100*	*05/04/17 09:19*	*05/06/17 22:13*	*1*
Nitrobenzene-d5 (Surr)	*92*		*25 - 105*	*05/04/17 09:19*	*05/06/17 22:13*	*1*
Phenol-d5 (Surr)	*75*		*21 - 100*	*05/04/17 09:19*	*05/06/17 22:13*	*1*
Terphenyl-d14 (Surr)	*78*		*20 - 124*	*05/04/17 09:19*	*05/06/17 22:13*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*22 - 118*	*05/04/17 09:19*	*05/06/17 22:13*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.61	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total TCDD	ND		10	0.61	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,7,8-PeCDD	**0.12**	**J B q**	51	0.072	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total PeCDD	**0.54**	**J B q**	51	0.072	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,4,7,8-HxCDD	**1.1**	**J B**	51	0.20	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,6,7,8-HxCDD	**1.1**	**J B q**	51	0.22	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,7,8,9-HxCDD	**0.98**	**J B q**	51	0.20	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total HxCDD	**3.7**	**J B q**	51	0.21	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,4,6,7,8-HpCDD	**7.1**	**J B**	51	0.74	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total HpCDD	**14**	**J B**	51	0.74	pg/L		05/01/17 15:01	05/03/17 07:00	1
OCDD	**80**	**J B**	100	0.13	pg/L		05/01/17 15:01	05/03/17 07:00	1
2,3,7,8-TCDF	ND		10	0.43	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total TCDF	ND		10	0.43	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,7,8-PeCDF	ND		51	0.38	pg/L		05/01/17 15:01	05/03/17 07:00	1
2,3,4,7,8-PeCDF	ND		51	0.37	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total PeCDF	ND		51	0.38	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,4,7,8-HxCDF	**1.2**	**J B**	51	0.35	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,6,7,8-HxCDF	**0.98**	**J B q**	51	0.32	pg/L		05/01/17 15:01	05/03/17 07:00	1
2,3,4,6,7,8-HxCDF	**0.98**	**J B q**	51	0.38	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,7,8,9-HxCDF	ND		51	0.46	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total HxCDF	**4.6**	**J B q**	51	0.38	pg/L		05/01/17 15:01	05/03/17 07:00	1

Client Sample ID: SUPE-EB-02-042717

Lab Sample ID: 180-65736-6
Matrix: Water
Date Collected: 04/27/17 15:56
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	3.6	J B	51	0.28	pg/L		05/01/17 15:01	05/03/17 07:00	1
1,2,3,4,7,8,9-HpCDF	2.0	J B	51	0.41	pg/L		05/01/17 15:01	05/03/17 07:00	1
Total HpCDF	10	J B	51	0.35	pg/L		05/01/17 15:01	05/03/17 07:00	1
OCDF	10	J B	100	0.15	pg/L		05/01/17 15:01	05/03/17 07:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*73*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,7,8-PeCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,4,7,8-HxCDD	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-OCDD	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-2,3,7,8-TCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-2,3,4,7,8-PeCDF	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,4,7,8-HxCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,6,7,8-HxCDF	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-2,3,4,6,7,8-HxCDF	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,7,8,9-HxCDF	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*
13C-OCDF	*73*		*40 - 135*	*05/01/17 15:01*	*05/03/17 07:00*	*1*

Client Sample ID: SUPE-M-99A-042717

Lab Sample ID: 180-65736-7
Matrix: Water
Date Collected: 04/27/17 21:00
Date Received: 04/28/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 17:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:02	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 17:02	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 17:02	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 17:02	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 17:02	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 17:02	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 17:02	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 17:02	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 17:02	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 17:02	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 17:02	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 17:02	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*		*05/06/17 17:02*	*1*
4-Bromofluorobenzene (Surr)	*93*		*69 - 120*		*05/06/17 17:02*	*1*
Dibromofluoromethane (Surr)	*84*		*69 - 124*		*05/06/17 17:02*	*1*
Toluene-d8 (Surr)	*103*		*73 - 120*		*05/06/17 17:02*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-M-99A-042717
Date Collected: 04/27/17 21:00
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 22:41	1
Acenaphthylene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 22:41	1
Anthracene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzo[a]anthracene	ND		0.18	0.034	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzo[a]pyrene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzo[b]fluoranthene	ND	*	0.18	0.045	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzo[g,h,i]perylene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzo[k]fluoranthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 22:41	1
Bis(2-chloroethoxy)methane	ND		0.93	0.12	ug/L		05/04/17 09:19	05/06/17 22:41	1
Bis(2-chloroethyl)ether	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 22:41	1
bis(chloroisopropyl) ether	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 22:41	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.41	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Bromophenyl phenyl ether	ND		0.93	0.11	ug/L		05/04/17 09:19	05/06/17 22:41	1
Butyl benzyl phthalate	ND		0.93	0.20	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Chloroaniline	ND		0.93	0.27	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Chloro-3-methylphenol	ND		0.93	0.16	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Chloronaphthalene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Chlorophenol	ND		0.93	0.21	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Chlorophenyl phenyl ether	ND		0.93	0.074	ug/L		05/04/17 09:19	05/06/17 22:41	1
Chrysene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 22:41	1
Dibenz(a,h)anthracene	ND		0.18	0.025	ug/L		05/04/17 09:19	05/06/17 22:41	1
Dibenzofuran	ND		0.93	0.089	ug/L		05/04/17 09:19	05/06/17 22:41	1
1,2-Dichlorobenzene	ND		0.93	0.10	ug/L		05/04/17 09:19	05/06/17 22:41	1
1,3-Dichlorobenzene	ND		0.93	0.070	ug/L		05/04/17 09:19	05/06/17 22:41	1
1,4-Dichlorobenzene	ND		0.93	0.15	ug/L		05/04/17 09:19	05/06/17 22:41	1
3,3'-Dichlorobenzidine	ND		0.93	0.14	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4-Dichlorophenol	ND		0.18	0.062	ug/L		05/04/17 09:19	05/06/17 22:41	1
Diethyl phthalate	ND		0.93	0.27	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4-Dimethylphenol	ND		0.93	0.16	ug/L		05/04/17 09:19	05/06/17 22:41	1
Dimethyl phthalate	ND		0.93	0.17	ug/L		05/04/17 09:19	05/06/17 22:41	1
Di-n-butyl phthalate	ND		0.93	0.22	ug/L		05/04/17 09:19	05/06/17 22:41	1
4,6-Dinitro-2-methylphenol	ND		4.6	1.4	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4-Dinitrophenol	ND		4.6	2.3	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4-Dinitrotoluene	ND		0.93	0.20	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,6-Dinitrotoluene	ND		0.93	0.13	ug/L		05/04/17 09:19	05/06/17 22:41	1
Di-n-octyl phthalate	ND		0.93	0.19	ug/L		05/04/17 09:19	05/06/17 22:41	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 22:41	1
Fluorene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 22:41	1
Hexachlorobenzene	ND		0.18	0.056	ug/L		05/04/17 09:19	05/06/17 22:41	1
Hexachlorobutadiene	ND		0.18	0.087	ug/L		05/04/17 09:19	05/06/17 22:41	1
Hexachlorocyclopentadiene	ND		0.93	0.13	ug/L		05/04/17 09:19	05/06/17 22:41	1
Hexachloroethane	ND		0.93	0.13	ug/L		05/04/17 09:19	05/06/17 22:41	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 22:41	1
Isophorone	ND		0.93	0.068	ug/L		05/04/17 09:19	05/06/17 22:41	1
1-Methylnaphthalene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Methylphenol	ND		0.93	0.17	ug/L		05/04/17 09:19	05/06/17 22:41	1
Methylphenol, 3 & 4	ND		0.93	0.19	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Nitroaniline	ND		4.6	0.62	ug/L		05/04/17 09:19	05/06/17 22:41	1

Client Sample ID: SUPE-M-99A-042717
Date Collected: 04/27/17 21:00
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		4.6	0.75	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Nitroaniline	ND		4.6	0.72	ug/L		05/04/17 09:19	05/06/17 22:41	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 22:41	1
2-Nitrophenol	ND		0.93	0.10	ug/L		05/04/17 09:19	05/06/17 22:41	1
4-Nitrophenol	ND	*	4.6	0.74	ug/L		05/04/17 09:19	05/06/17 22:41	1
N-Nitrosodi-n-propylamine	ND		0.18	0.046	ug/L		05/04/17 09:19	05/06/17 22:41	1
N-Nitrosodiphenylamine	ND		0.93	0.11	ug/L		05/04/17 09:19	05/06/17 22:41	1
Pentachlorophenol	ND		0.93	0.46	ug/L		05/04/17 09:19	05/06/17 22:41	1
Phenanthrene	ND		0.18	0.038	ug/L		05/04/17 09:19	05/06/17 22:41	1
Phenol	ND		0.93	0.051	ug/L		05/04/17 09:19	05/06/17 22:41	1
Pyrene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,3,4,6-Tetrachlorophenol	ND		0.93	0.098	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,3,5,6-Tetrachlorophenol	ND		0.93	0.11	ug/L		05/04/17 09:19	05/06/17 22:41	1
1,2,4-Trichlorobenzene	ND		0.93	0.079	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4,5-Trichlorophenol	ND		0.93	0.11	ug/L		05/04/17 09:19	05/06/17 22:41	1
2,4,6-Trichlorophenol	ND		0.93	0.28	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzoic acid	ND		4.6	1.5	ug/L		05/04/17 09:19	05/06/17 22:41	1
Benzyl alcohol	ND		0.93	0.18	ug/L		05/04/17 09:19	05/06/17 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*24 - 100*	*05/04/17 09:19*	*05/06/17 22:41*	*1*
2-Fluorophenol (Surr)	*51*		*20 - 100*	*05/04/17 09:19*	*05/06/17 22:41*	*1*
Nitrobenzene-d5 (Surr)	*68*		*25 - 105*	*05/04/17 09:19*	*05/06/17 22:41*	*1*
Phenol-d5 (Surr)	*53*		*21 - 100*	*05/04/17 09:19*	*05/06/17 22:41*	*1*
Terphenyl-d14 (Surr)	*44*		*20 - 124*	*05/04/17 09:19*	*05/06/17 22:41*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*22 - 118*	*05/04/17 09:19*	*05/06/17 22:41*	*1*

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.96	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total TCDD	ND		10	0.96	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,7,8-PeCDD	ND		51	0.49	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total PeCDD	**0.89**	**J q B**	51	0.49	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,4,7,8-HxCDD	**2.0**	**J B**	51	0.27	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,6,7,8-HxCDD	**1.8**	**J q B**	51	0.27	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,7,8,9-HxCDD	**2.3**	**J q B**	51	0.26	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total HxCDD	**7.7**	**J q B**	51	0.27	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,4,6,7,8-HpCDD	**5.4**	**J B**	51	0.77	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total HpCDD	**12**	**J q B**	51	0.77	pg/L		05/01/17 15:01	05/03/17 11:58	1
OCDD	**35**	**J B**	100	0.22	pg/L		05/01/17 15:01	05/03/17 11:58	1
2,3,7,8-TCDF	ND		10	0.63	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total TCDF	ND		10	0.63	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,7,8-PeCDF	ND		51	0.86	pg/L		05/01/17 15:01	05/03/17 11:58	1
2,3,4,7,8-PeCDF	**1.8**	**J q B**	51	0.80	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total PeCDF	**3.2**	**J q B**	51	0.83	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,4,7,8-HxCDF	**2.1**	**J q B**	51	0.24	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,6,7,8-HxCDF	**1.9**	**J q B**	51	0.22	pg/L		05/01/17 15:01	05/03/17 11:58	1
2,3,4,6,7,8-HxCDF	**2.1**	**J q B**	51	0.24	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,7,8,9-HxCDF	**2.3**	**J B**	51	0.31	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total HxCDF	**13**	**J q B**	51	0.25	pg/L		05/01/17 15:01	05/03/17 11:58	1

Client Sample ID: SUPE-M-99A-042717

Date Collected: 04/27/17 21:00
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDF	4.8	J B	51	0.21	pg/L		05/01/17 15:01	05/03/17 11:58	1
1,2,3,4,7,8,9-HpCDF	3.5	J B	51	0.30	pg/L		05/01/17 15:01	05/03/17 11:58	1
Total HpCDF	9.5	J B	51	0.26	pg/L		05/01/17 15:01	05/03/17 11:58	1
OCDF	15	J B	100	0.21	pg/L		05/01/17 15:01	05/03/17 11:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,7,8-PeCDD	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,4,7,8-HxCDD	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-OCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-2,3,7,8-TCDF	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,7,8-PeCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-2,3,4,7,8-PeCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,4,7,8-HxCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,6,7,8-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-2,3,4,6,7,8-HxCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,7,8,9-HxCDF	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*
13C-OCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 11:58*	*1*

Client Sample ID: SUPE-TB-01-042617

Date Collected: 04/26/17 00:00
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 17:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:24	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 17:24	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 17:24	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 17:24	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 17:24	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 17:24	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 17:24	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 17:24	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 17:24	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 17:24	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 17:24	1
Toluene	0.43	J	1.0	0.23	ug/L			05/06/17 17:24	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*		*05/06/17 17:24*	*1*
4-Bromofluorobenzene (Surr)	*93*		*69 - 120*		*05/06/17 17:24*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 124*		*05/06/17 17:24*	*1*
Toluene-d8 (Surr)	*106*		*73 - 120*		*05/06/17 17:24*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-30C-042617
Date Collected: 04/26/17 16:38
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 17:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 17:48	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 17:48	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 17:48	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 17:48	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 17:48	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 17:48	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 17:48	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 17:48	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 17:48	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 17:48	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 17:48	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 17:48	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*		*05/06/17 17:48*	*1*
4-Bromofluorobenzene (Surr)	*93*		*69 - 120*		*05/06/17 17:48*	*1*
Dibromofluoromethane (Surr)	*88*		*69 - 124*		*05/06/17 17:48*	*1*
Toluene-d8 (Surr)	*104*		*73 - 120*		*05/06/17 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.028	ug/L		05/03/17 08:33	05/08/17 18:45	1
Acenaphthylene	ND		0.18	0.021	ug/L		05/03/17 08:33	05/08/17 18:45	1
Anthracene	ND		0.18	0.018	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzo[a]anthracene	ND		0.18	0.035	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzo[a]pyrene	ND		0.18	0.027	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzo[b]fluoranthene	ND		0.18	0.047	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzo[k]fluoranthene	ND		0.18	0.029	ug/L		05/03/17 08:33	05/08/17 18:45	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/03/17 08:33	05/08/17 18:45	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/03/17 08:33	05/08/17 18:45	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/03/17 08:33	05/08/17 18:45	1
Bis(2-ethylhexyl) phthalate	**0.92**	**J**	1.9	0.42	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/03/17 08:33	05/08/17 18:45	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/03/17 08:33	05/08/17 18:45	1
Chrysene	ND		0.18	0.030	ug/L		05/03/17 08:33	05/08/17 18:45	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/03/17 08:33	05/08/17 18:45	1
Dibenzofuran	ND		0.96	0.093	ug/L		05/03/17 08:33	05/08/17 18:45	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/03/17 08:33	05/08/17 18:45	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/03/17 08:33	05/08/17 18:45	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/03/17 08:33	05/08/17 18:45	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/03/17 08:33	05/08/17 18:45	1

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-30C-042617
Date Collected: 04/26/17 16:38
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/03/17 08:33	05/08/17 18:45	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/03/17 08:33	05/08/17 18:45	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/03/17 08:33	05/08/17 18:45	1
Di-n-butyl phthalate	**0.25**	**J**	0.96	0.23	ug/L		05/03/17 08:33	05/08/17 18:45	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/03/17 08:33	05/08/17 18:45	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/03/17 08:33	05/08/17 18:45	1
Fluoranthene	ND		0.18	0.020	ug/L		05/03/17 08:33	05/08/17 18:45	1
Fluorene	ND		0.18	0.023	ug/L		05/03/17 08:33	05/08/17 18:45	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/03/17 08:33	05/08/17 18:45	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/03/17 08:33	05/08/17 18:45	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/03/17 08:33	05/08/17 18:45	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/03/17 08:33	05/08/17 18:45	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/03/17 08:33	05/08/17 18:45	1
Isophorone	ND		0.96	0.071	ug/L		05/03/17 08:33	05/08/17 18:45	1
1-Methylnaphthalene	ND		0.18	0.030	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/03/17 08:33	05/08/17 18:45	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/03/17 08:33	05/08/17 18:45	1
3-Nitroaniline	ND		4.8	0.77	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/03/17 08:33	05/08/17 18:45	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/03/17 08:33	05/08/17 18:45	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/03/17 08:33	05/08/17 18:45	1
4-Nitrophenol	ND		4.8	0.77	ug/L		05/03/17 08:33	05/08/17 18:45	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/03/17 08:33	05/08/17 18:45	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/03/17 08:33	05/08/17 18:45	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/03/17 08:33	05/08/17 18:45	1
Phenanthrene	ND		0.18	0.040	ug/L		05/03/17 08:33	05/08/17 18:45	1
Phenol	ND		0.96	0.053	ug/L		05/03/17 08:33	05/08/17 18:45	1
Pyrene	ND		0.18	0.022	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.10	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/03/17 08:33	05/08/17 18:45	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/03/17 08:33	05/08/17 18:45	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzoic acid	ND		4.8	1.6	ug/L		05/03/17 08:33	05/08/17 18:45	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/03/17 08:33	05/08/17 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*24 - 100*	*05/03/17 08:33*	*05/08/17 18:45*	*1*
2-Fluorophenol (Surr)	*63*		*20 - 100*	*05/03/17 08:33*	*05/08/17 18:45*	*1*
Nitrobenzene-d5 (Surr)	*75*		*25 - 105*	*05/03/17 08:33*	*05/08/17 18:45*	*1*
Phenol-d5 (Surr)	*68*		*21 - 100*	*05/03/17 08:33*	*05/08/17 18:45*	*1*
Terphenyl-d14 (Surr)	*71*		*20 - 124*	*05/03/17 08:33*	*05/08/17 18:45*	*1*
2,4,6-Tribromophenol (Surr)	*115*		*22 - 118*	*05/03/17 08:33*	*05/08/17 18:45*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-30C-042617
Date Collected: 04/26/17 16:38
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.83	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total TCDD	ND		9.6	0.83	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,7,8-PeCDD	**0.77**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total PeCDD	**2.9**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,4,7,8-HxCDD	**2.0**	**J B q**	48	0.32	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,6,7,8-HxCDD	**1.7**	**J B**	48	0.35	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,7,8,9-HxCDD	**2.7**	**J B**	48	0.32	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total HxCDD	**7.7**	**J B q**	48	0.33	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,4,6,7,8-HpCDD	**5.2**	**J B**	48	1.0	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total HpCDD	**12**	**J B q**	48	1.0	pg/L		05/01/17 15:01	05/03/17 13:05	1
OCDD	**36**	**J B**	96	0.48	pg/L		05/01/17 15:01	05/03/17 13:05	1
2,3,7,8-TCDF	ND		9.6	0.81	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total TCDF	ND		9.6	0.81	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,7,8-PeCDF	ND		48	0.89	pg/L		05/01/17 15:01	05/03/17 13:05	1
2,3,4,7,8-PeCDF	ND		48	0.86	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total PeCDF	ND		48	0.89	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,4,7,8-HxCDF	ND		48	0.37	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,6,7,8-HxCDF	**1.4**	**J B q**	48	0.36	pg/L		05/01/17 15:01	05/03/17 13:05	1
2,3,4,6,7,8-HxCDF	**2.6**	**J B q**	48	0.42	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,7,8,9-HxCDF	**1.8**	**J B q**	48	0.51	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total HxCDF	**8.6**	**J B q**	48	0.41	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,4,6,7,8-HpCDF	**2.8**	**J B q**	48	0.27	pg/L		05/01/17 15:01	05/03/17 13:05	1
1,2,3,4,7,8,9-HpCDF	**3.5**	**J B**	48	0.35	pg/L		05/01/17 15:01	05/03/17 13:05	1
Total HpCDF	**8.3**	**J B q**	48	0.31	pg/L		05/01/17 15:01	05/03/17 13:05	1
OCDF	**8.7**	**J B**	96	0.14	pg/L		05/01/17 15:01	05/03/17 13:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,7,8-PeCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,4,7,8-HxCDD	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-OCDD	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-2,3,7,8-TCDF	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,7,8-PeCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-2,3,4,7,8-PeCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,4,7,8-HxCDF	*92*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,6,7,8-HxCDF	*89*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-2,3,4,6,7,8-HxCDF	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,7,8,9-HxCDF	*91*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*94*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*
13C-OCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 13:05*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-EB-01-042617
Date Collected: 04/26/17 17:15
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 18:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:11	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 18:11	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 18:11	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 18:11	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 18:11	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 18:11	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 18:11	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 18:11	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 18:11	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 18:11	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 18:11	1
Toluene	**0.41**	**J**	1.0	0.23	ug/L			05/06/17 18:11	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 138*		*05/06/17 18:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*		*05/06/17 18:11*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 124*		*05/06/17 18:11*	*1*
Toluene-d8 (Surr)	*104*		*73 - 120*		*05/06/17 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.029	ug/L		05/03/17 08:33	05/08/17 19:12	1
Acenaphthylene	ND		0.19	0.022	ug/L		05/03/17 08:33	05/08/17 19:12	1
Anthracene	ND		0.19	0.019	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzo[a]anthracene	ND		0.19	0.037	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzo[b]fluoranthene	ND		0.19	0.049	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzo[g,h,i]perylene	ND		0.19	0.029	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzo[k]fluoranthene	ND		0.19	0.030	ug/L		05/03/17 08:33	05/08/17 19:12	1
Bis(2-chloroethoxy)methane	ND		1.0	0.13	ug/L		05/03/17 08:33	05/08/17 19:12	1
Bis(2-chloroethyl)ether	ND		0.19	0.032	ug/L		05/03/17 08:33	05/08/17 19:12	1
bis(chloroisopropyl) ether	ND		0.19	0.024	ug/L		05/03/17 08:33	05/08/17 19:12	1
Bis(2-ethylhexyl) phthalate	**0.83**	**J**	2.0	0.44	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/03/17 08:33	05/08/17 19:12	1
Butyl benzyl phthalate	ND		1.0	0.21	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Chloroaniline	ND		1.0	0.29	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Chloro-3-methylphenol	ND		1.0	0.17	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Chloronaphthalene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Chlorophenol	ND		1.0	0.23	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Chlorophenyl phenyl ether	ND		1.0	0.080	ug/L		05/03/17 08:33	05/08/17 19:12	1
Chrysene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/08/17 19:12	1
Dibenz(a,h)anthracene	ND		0.19	0.027	ug/L		05/03/17 08:33	05/08/17 19:12	1
Dibenzofuran	ND		1.0	0.097	ug/L		05/03/17 08:33	05/08/17 19:12	1
1,2-Dichlorobenzene	ND		1.0	0.11	ug/L		05/03/17 08:33	05/08/17 19:12	1
1,3-Dichlorobenzene	ND		1.0	0.075	ug/L		05/03/17 08:33	05/08/17 19:12	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L		05/03/17 08:33	05/08/17 19:12	1
3,3'-Dichlorobenzidine	ND		1.0	0.15	ug/L		05/03/17 08:33	05/08/17 19:12	1

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-EB-01-042617
Date Collected: 04/26/17 17:15
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.19	0.067	ug/L		05/03/17 08:33	05/08/17 19:12	1
Diethyl phthalate	ND		1.0	0.30	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/03/17 08:33	05/08/17 19:12	1
Dimethyl phthalate	ND		1.0	0.18	ug/L		05/03/17 08:33	05/08/17 19:12	1
Di-n-butyl phthalate	**0.31**	**J**	1.0	0.24	ug/L		05/03/17 08:33	05/08/17 19:12	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.6	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,4-Dinitrophenol	ND		5.0	2.5	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,4-Dinitrotoluene	ND		1.0	0.21	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,6-Dinitrotoluene	ND		1.0	0.14	ug/L		05/03/17 08:33	05/08/17 19:12	1
Di-n-octyl phthalate	ND		1.0	0.20	ug/L		05/03/17 08:33	05/08/17 19:12	1
Fluoranthene	ND		0.19	0.021	ug/L		05/03/17 08:33	05/08/17 19:12	1
Fluorene	ND		0.19	0.024	ug/L		05/03/17 08:33	05/08/17 19:12	1
Hexachlorobenzene	ND		0.19	0.061	ug/L		05/03/17 08:33	05/08/17 19:12	1
Hexachlorobutadiene	ND		0.19	0.094	ug/L		05/03/17 08:33	05/08/17 19:12	1
Hexachlorocyclopentadiene	ND		1.0	0.14	ug/L		05/03/17 08:33	05/08/17 19:12	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/03/17 08:33	05/08/17 19:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.043	ug/L		05/03/17 08:33	05/08/17 19:12	1
Isophorone	ND		1.0	0.074	ug/L		05/03/17 08:33	05/08/17 19:12	1
1-Methylnaphthalene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Methylphenol	ND		1.0	0.19	ug/L		05/03/17 08:33	05/08/17 19:12	1
Methylphenol, 3 & 4	ND		1.0	0.21	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Nitroaniline	ND		5.0	0.67	ug/L		05/03/17 08:33	05/08/17 19:12	1
3-Nitroaniline	ND		5.0	0.81	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Nitroaniline	ND		5.0	0.77	ug/L		05/03/17 08:33	05/08/17 19:12	1
Nitrobenzene	ND		2.0	0.15	ug/L		05/03/17 08:33	05/08/17 19:12	1
2-Nitrophenol	ND		1.0	0.11	ug/L		05/03/17 08:33	05/08/17 19:12	1
4-Nitrophenol	ND		5.0	0.80	ug/L		05/03/17 08:33	05/08/17 19:12	1
N-Nitrosodi-n-propylamine	ND		0.19	0.050	ug/L		05/03/17 08:33	05/08/17 19:12	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/03/17 08:33	05/08/17 19:12	1
Pentachlorophenol	ND		1.0	0.50	ug/L		05/03/17 08:33	05/08/17 19:12	1
Phenanthrene	ND		0.19	0.042	ug/L		05/03/17 08:33	05/08/17 19:12	1
Phenol	ND		1.0	0.055	ug/L		05/03/17 08:33	05/08/17 19:12	1
Pyrene	ND		0.19	0.023	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.11	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,3,5,6-Tetrachlorophenol	ND		1.0	0.12	ug/L		05/03/17 08:33	05/08/17 19:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.085	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/03/17 08:33	05/08/17 19:12	1
2,4,6-Trichlorophenol	ND		1.0	0.30	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzoic acid	ND		5.0	1.6	ug/L		05/03/17 08:33	05/08/17 19:12	1
Benzyl alcohol	ND		1.0	0.20	ug/L		05/03/17 08:33	05/08/17 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*24 - 100*	*05/03/17 08:33*	*05/08/17 19:12*	*1*
2-Fluorophenol (Surr)	*76*		*20 - 100*	*05/03/17 08:33*	*05/08/17 19:12*	*1*
Nitrobenzene-d5 (Surr)	*95*		*25 - 105*	*05/03/17 08:33*	*05/08/17 19:12*	*1*
Phenol-d5 (Surr)	*77*		*21 - 100*	*05/03/17 08:33*	*05/08/17 19:12*	*1*
Terphenyl-d14 (Surr)	*95*		*20 - 124*	*05/03/17 08:33*	*05/08/17 19:12*	*1*
2,4,6-Tribromophenol (Surr)	*130*	*X*	*22 - 118*	*05/03/17 08:33*	*05/08/17 19:12*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-EB-01-042617
Date Collected: 04/26/17 17:15
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.93	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total TCDD	ND		9.6	0.93	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,7,8-PeCDD	**0.74**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total PeCDD	**2.7**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,4,7,8-HxCDD	**1.3**	**J B q**	48	0.49	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,6,7,8-HxCDD	**1.5**	**J B q**	48	0.51	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,7,8,9-HxCDD	**2.1**	**J B**	48	0.47	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total HxCDD	**4.9**	**J B q**	48	0.49	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,4,6,7,8-HpCDD	**3.6**	**J B**	48	1.5	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total HpCDD	**3.6**	**J B**	48	1.5	pg/L		05/01/17 15:01	05/03/17 14:06	1
OCDD	**13**	**J B**	96	0.22	pg/L		05/01/17 15:01	05/03/17 14:06	1
2,3,7,8-TCDF	ND		9.6	1.1	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total TCDF	ND		9.6	1.1	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,7,8-PeCDF	ND		48	1.2	pg/L		05/01/17 15:01	05/03/17 14:06	1
2,3,4,7,8-PeCDF	ND		48	1.1	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total PeCDF	ND		48	1.2	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,4,7,8-HxCDF	**1.5**	**J B q**	48	0.59	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,6,7,8-HxCDF	**1.8**	**J B**	48	0.54	pg/L		05/01/17 15:01	05/03/17 14:06	1
2,3,4,6,7,8-HxCDF	**2.2**	**J B q**	48	0.59	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,7,8,9-HxCDF	**1.7**	**J B q**	48	0.74	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total HxCDF	**10**	**J B q**	48	0.61	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,4,6,7,8-HpCDF	**2.5**	**J B**	48	0.28	pg/L		05/01/17 15:01	05/03/17 14:06	1
1,2,3,4,7,8,9-HpCDF	**2.9**	**J B**	48	0.39	pg/L		05/01/17 15:01	05/03/17 14:06	1
Total HpCDF	**5.9**	**J B q**	48	0.34	pg/L		05/01/17 15:01	05/03/17 14:06	1
OCDF	**6.9**	**J B**	96	0.24	pg/L		05/01/17 15:01	05/03/17 14:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,7,8-PeCDD	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,4,7,8-HxCDD	*73*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,6,7,8-HxCDD	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-OCDD	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-2,3,7,8-TCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-2,3,4,7,8-PeCDF	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,4,7,8-HxCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,6,7,8-HxCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-2,3,4,6,7,8-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,7,8,9-HxCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*
13C-OCDF	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 14:06*	*1*

Client Sample ID: SUPE-W-06A-042717
Date Collected: 04/27/17 10:04
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 18:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:33	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 18:33	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 18:33	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 18:33	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 18:33	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 18:33	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 18:33	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 18:33	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 18:33	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 18:33	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 18:33	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 18:33	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 138*		*05/06/17 18:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*69 - 120*		*05/06/17 18:33*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 124*		*05/06/17 18:33*	*1*
Toluene-d8 (Surr)	*101*		*73 - 120*		*05/06/17 18:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 23:09	1
Acenaphthylene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 23:09	1
Anthracene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzo[a]anthracene	ND		0.18	0.035	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzo[a]pyrene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzo[b]fluoranthene	ND	*	0.18	0.047	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzo[k]fluoranthene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 23:09	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:09	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:09	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 23:09	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J**	1.9	0.42	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:09	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/04/17 09:19	05/06/17 23:09	1
Chrysene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:09	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 23:09	1
Dibenzofuran	ND		0.96	0.093	ug/L		05/04/17 09:19	05/06/17 23:09	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 23:09	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/04/17 09:19	05/06/17 23:09	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:09	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/04/17 09:19	05/06/17 23:09	1

Client Sample ID: SUPE-W-06A-042717
Date Collected: 04/27/17 10:04
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/04/17 09:19	05/06/17 23:09	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:09	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 23:09	1
Di-n-butyl phthalate	**0.35**	**J**	0.96	0.23	ug/L		05/04/17 09:19	05/06/17 23:09	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:09	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 23:09	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 23:09	1
Fluorene	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 23:09	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/04/17 09:19	05/06/17 23:09	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/04/17 09:19	05/06/17 23:09	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:09	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/04/17 09:19	05/06/17 23:09	1
Isophorone	ND		0.96	0.071	ug/L		05/04/17 09:19	05/06/17 23:09	1
1-Methylnaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 23:09	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/04/17 09:19	05/06/17 23:09	1
3-Nitroaniline	ND		4.8	0.77	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/04/17 09:19	05/06/17 23:09	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 23:09	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:09	1
4-Nitrophenol	ND	*	4.8	0.77	ug/L		05/04/17 09:19	05/06/17 23:09	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/04/17 09:19	05/06/17 23:09	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 23:09	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/04/17 09:19	05/06/17 23:09	1
Phenanthrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 23:09	1
Phenol	ND		0.96	0.053	ug/L		05/04/17 09:19	05/06/17 23:09	1
Pyrene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:09	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 23:09	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzoic acid	ND		4.8	1.6	ug/L		05/04/17 09:19	05/06/17 23:09	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/04/17 09:19	05/06/17 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*24 - 100*	*05/04/17 09:19*	*05/06/17 23:09*	*1*
2-Fluorophenol (Surr)	*28*		*20 - 100*	*05/04/17 09:19*	*05/06/17 23:09*	*1*
Nitrobenzene-d5 (Surr)	*46*		*25 - 105*	*05/04/17 09:19*	*05/06/17 23:09*	*1*
Phenol-d5 (Surr)	*29*		*21 - 100*	*05/04/17 09:19*	*05/06/17 23:09*	*1*
Terphenyl-d14 (Surr)	*36*		*20 - 124*	*05/04/17 09:19*	*05/06/17 23:09*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*22 - 118*	*05/04/17 09:19*	*05/06/17 23:09*	*1*

Client Sample ID: SUPE-W-06A-042717

Date Collected: 04/27/17 10:04
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.5	0.51	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total TCDD	ND		9.5	0.51	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,7,8-PeCDD	ND		48	0.27	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total PeCDD	ND		48	0.27	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,4,7,8-HxCDD	**0.68**	**J B**	48	0.23	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,6,7,8-HxCDD	**1.1**	**J B q**	48	0.24	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,7,8,9-HxCDD	**1.4**	**J B q**	48	0.22	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total HxCDD	**4.6**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,4,6,7,8-HpCDD	**10**	**J B**	48	0.72	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total HpCDD	**25**	**J B**	48	0.72	pg/L		05/01/17 15:01	05/03/17 15:07	1
OCDD	**100**	**B**	95	0.10	pg/L		05/01/17 15:01	05/03/17 15:07	1
2,3,7,8-TCDF	ND		9.5	0.64	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total TCDF	ND		9.5	0.64	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,7,8-PeCDF	ND		48	0.38	pg/L		05/01/17 15:01	05/03/17 15:07	1
2,3,4,7,8-PeCDF	ND		48	0.37	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total PeCDF	**2.3**	**J B q**	48	0.37	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,4,7,8-HxCDF	**1.1**	**J B q**	48	0.35	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,6,7,8-HxCDF	**2.2**	**J B q**	48	0.33	pg/L		05/01/17 15:01	05/03/17 15:07	1
2,3,4,6,7,8-HxCDF	**1.6**	**J B q**	48	0.36	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,7,8,9-HxCDF	ND		48	0.43	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total HxCDF	**11**	**J B q**	48	0.37	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,4,6,7,8-HpCDF	**3.7**	**J B q**	48	0.39	pg/L		05/01/17 15:01	05/03/17 15:07	1
1,2,3,4,7,8,9-HpCDF	**1.6**	**J B**	48	0.50	pg/L		05/01/17 15:01	05/03/17 15:07	1
Total HpCDF	**12**	**J B q**	48	0.44	pg/L		05/01/17 15:01	05/03/17 15:07	1
OCDF	**13**	**J B**	95	0.20	pg/L		05/01/17 15:01	05/03/17 15:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,4,7,8-HxCDD	*69*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,6,7,8-HxCDD	*70*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-OCDD	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-2,3,7,8-TCDF	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,7,8-PeCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-2,3,4,7,8-PeCDF	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,4,7,8-HxCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,6,7,8-HxCDF	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-2,3,4,6,7,8-HxCDF	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,7,8,9-HxCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*
13C-OCDF	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 15:07*	*1*

Client Sample ID: SUPE-W-06C-042717

Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 18:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 18:57	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 18:57	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 18:57	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 18:57	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 18:57	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 18:57	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 18:57	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 18:57	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 18:57	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 18:57	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 18:57	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 18:57	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*		*05/06/17 18:57*	*1*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*		*05/06/17 18:57*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 124*		*05/06/17 18:57*	*1*
Toluene-d8 (Surr)	*102*		*73 - 120*		*05/06/17 18:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 23:37	1
Acenaphthylene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/06/17 23:37	1
Anthracene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzo[a]anthracene	ND		0.18	0.035	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzo[a]pyrene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzo[b]fluoranthene	ND	*	0.18	0.047	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzo[g,h,i]perylene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzo[k]fluoranthene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/06/17 23:37	1
Bis(2-chloroethoxy)methane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:37	1
Bis(2-chloroethyl)ether	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:37	1
bis(chloroisopropyl) ether	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 23:37	1
Bis(2-ethylhexyl) phthalate	**0.97**	**J**	1.9	0.42	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Bromophenyl phenyl ether	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:37	1
Butyl benzyl phthalate	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Chloroaniline	ND		0.96	0.28	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Chloro-3-methylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Chloronaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Chlorophenol	ND		0.96	0.22	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Chlorophenyl phenyl ether	ND		0.96	0.077	ug/L		05/04/17 09:19	05/06/17 23:37	1
Chrysene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:37	1
Dibenz(a,h)anthracene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/06/17 23:37	1
Dibenzofuran	ND		0.96	0.093	ug/L		05/04/17 09:19	05/06/17 23:37	1
1,2-Dichlorobenzene	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 23:37	1
1,3-Dichlorobenzene	ND		0.96	0.072	ug/L		05/04/17 09:19	05/06/17 23:37	1
1,4-Dichlorobenzene	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:37	1
3,3'-Dichlorobenzidine	ND		0.96	0.14	ug/L		05/04/17 09:19	05/06/17 23:37	1

Client Sample ID: SUPE-W-06C-042717
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.18	0.065	ug/L		05/04/17 09:19	05/06/17 23:37	1
Diethyl phthalate	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,4-Dimethylphenol	ND		0.96	0.16	ug/L		05/04/17 09:19	05/06/17 23:37	1
Dimethyl phthalate	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 23:37	1
Di-n-butyl phthalate	**0.81**	**J**	0.96	0.23	ug/L		05/04/17 09:19	05/06/17 23:37	1
4,6-Dinitro-2-methylphenol	ND		4.8	1.5	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,4-Dinitrophenol	ND		4.8	2.4	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,4-Dinitrotoluene	ND		0.96	0.21	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:37	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 23:37	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/06/17 23:37	1
Fluorene	ND		0.18	0.023	ug/L		05/04/17 09:19	05/06/17 23:37	1
Hexachlorobenzene	ND		0.18	0.059	ug/L		05/04/17 09:19	05/06/17 23:37	1
Hexachlorobutadiene	ND		0.18	0.090	ug/L		05/04/17 09:19	05/06/17 23:37	1
Hexachlorocyclopentadiene	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:37	1
Hexachloroethane	ND		0.96	0.13	ug/L		05/04/17 09:19	05/06/17 23:37	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.042	ug/L		05/04/17 09:19	05/06/17 23:37	1
Isophorone	ND		0.96	0.071	ug/L		05/04/17 09:19	05/06/17 23:37	1
1-Methylnaphthalene	ND		0.18	0.030	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Methylphenol	ND		0.96	0.18	ug/L		05/04/17 09:19	05/06/17 23:37	1
Methylphenol, 3 & 4	ND		0.96	0.20	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Nitroaniline	ND		4.8	0.65	ug/L		05/04/17 09:19	05/06/17 23:37	1
3-Nitroaniline	ND		4.8	0.77	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Nitroaniline	ND		4.8	0.74	ug/L		05/04/17 09:19	05/06/17 23:37	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/06/17 23:37	1
2-Nitrophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:37	1
4-Nitrophenol	ND	*	4.8	0.77	ug/L		05/04/17 09:19	05/06/17 23:37	1
N-Nitrosodi-n-propylamine	ND		0.18	0.048	ug/L		05/04/17 09:19	05/06/17 23:37	1
N-Nitrosodiphenylamine	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 23:37	1
Pentachlorophenol	ND		0.96	0.48	ug/L		05/04/17 09:19	05/06/17 23:37	1
Phenanthrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/06/17 23:37	1
Phenol	ND		0.96	0.053	ug/L		05/04/17 09:19	05/06/17 23:37	1
Pyrene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.10	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,3,5,6-Tetrachlorophenol	ND		0.96	0.11	ug/L		05/04/17 09:19	05/06/17 23:37	1
1,2,4-Trichlorobenzene	ND		0.96	0.082	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/04/17 09:19	05/06/17 23:37	1
2,4,6-Trichlorophenol	ND		0.96	0.29	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzoic acid	ND		4.8	1.6	ug/L		05/04/17 09:19	05/06/17 23:37	1
Benzyl alcohol	ND		0.96	0.19	ug/L		05/04/17 09:19	05/06/17 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*24 - 100*	*05/04/17 09:19*	*05/06/17 23:37*	*1*
2-Fluorophenol (Surr)	*60*		*20 - 100*	*05/04/17 09:19*	*05/06/17 23:37*	*1*
Nitrobenzene-d5 (Surr)	*81*		*25 - 105*	*05/04/17 09:19*	*05/06/17 23:37*	*1*
Phenol-d5 (Surr)	*66*		*21 - 100*	*05/04/17 09:19*	*05/06/17 23:37*	*1*
Terphenyl-d14 (Surr)	*50*		*20 - 124*	*05/04/17 09:19*	*05/06/17 23:37*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*22 - 118*	*05/04/17 09:19*	*05/06/17 23:37*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-06C-042717
Date Collected: 04/27/17 12:43
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.55	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total TCDD	ND		9.6	0.55	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,7,8-PeCDD	ND		48	0.29	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total PeCDD	ND		48	0.29	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,4,7,8-HxCDD	**0.82**	**J B q**	48	0.22	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,6,7,8-HxCDD	**0.67**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,7,8,9-HxCDD	**0.96**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total HxCDD	**4.4**	**J B q**	48	0.22	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,4,6,7,8-HpCDD	**11**	**J B**	48	0.60	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total HpCDD	**36**	**J B**	48	0.60	pg/L		05/01/17 15:01	05/03/17 16:08	1
OCDD	**110**	**B**	96	0.12	pg/L		05/01/17 15:01	05/03/17 16:08	1
2,3,7,8-TCDF	ND		9.6	0.46	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total TCDF	ND		9.6	0.46	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,7,8-PeCDF	ND		48	0.38	pg/L		05/01/17 15:01	05/03/17 16:08	1
2,3,4,7,8-PeCDF	ND		48	0.37	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total PeCDF	ND		48	0.38	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,4,7,8-HxCDF	**0.82**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,6,7,8-HxCDF	**0.75**	**J B q**	48	0.23	pg/L		05/01/17 15:01	05/03/17 16:08	1
2,3,4,6,7,8-HxCDF	**0.75**	**J B q**	48	0.25	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,7,8,9-HxCDF	ND		48	0.32	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total HxCDF	**5.9**	**J B q**	48	0.26	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,4,6,7,8-HpCDF	**4.0**	**J B**	48	0.17	pg/L		05/01/17 15:01	05/03/17 16:08	1
1,2,3,4,7,8,9-HpCDF	**0.94**	**J B q**	48	0.24	pg/L		05/01/17 15:01	05/03/17 16:08	1
Total HpCDF	**10**	**J B q**	48	0.21	pg/L		05/01/17 15:01	05/03/17 16:08	1
OCDF	**11**	**J B**	96	0.11	pg/L		05/01/17 15:01	05/03/17 16:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,7,8-PeCDD	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,4,7,8-HxCDD	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,6,7,8-HxCDD	*76*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-OCDD	*85*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-2,3,7,8-TCDF	*90*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,7,8-PeCDF	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-2,3,4,7,8-PeCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,4,7,8-HxCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,6,7,8-HxCDF	*78*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-2,3,4,6,7,8-HxCDF	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,7,8,9-HxCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*
13C-OCDF	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 16:08*	*1*

Client Sample ID: SUPE-W-12A-042717
Date Collected: 04/27/17 15:05
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 19:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 19:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 19:20	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 19:20	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 19:20	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 19:20	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 19:20	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 19:20	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 19:20	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 19:20	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 19:20	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 19:20	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 19:20	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 19:20	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*		*05/06/17 19:20*	*1*
4-Bromofluorobenzene (Surr)	*90*		*69 - 120*		*05/06/17 19:20*	*1*
Dibromofluoromethane (Surr)	*84*		*69 - 124*		*05/06/17 19:20*	*1*
Toluene-d8 (Surr)	*102*		*73 - 120*		*05/06/17 19:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/07/17 00:05	1
Acenaphthylene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/07/17 00:05	1
Anthracene	**0.026**	**J**	0.18	0.018	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzo[a]anthracene	ND		0.18	0.034	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzo[a]pyrene	ND		0.18	0.026	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzo[b]fluoranthene	ND	*	0.18	0.045	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzo[g,h,i]perylene	ND		0.18	0.027	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzo[k]fluoranthene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/07/17 00:05	1
Bis(2-chloroethoxy)methane	ND		0.93	0.12	ug/L		05/04/17 09:19	05/07/17 00:05	1
Bis(2-chloroethyl)ether	ND		0.18	0.029	ug/L		05/04/17 09:19	05/07/17 00:05	1
bis(chloroisopropyl) ether	ND		0.18	0.022	ug/L		05/04/17 09:19	05/07/17 00:05	1
Bis(2-ethylhexyl) phthalate	**0.62**	**J**	1.9	0.41	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Bromophenyl phenyl ether	ND		0.93	0.11	ug/L		05/04/17 09:19	05/07/17 00:05	1
Butyl benzyl phthalate	ND		0.93	0.20	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Chloroaniline	ND		0.93	0.27	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Chloro-3-methylphenol	ND		0.93	0.16	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Chloronaphthalene	ND		0.18	0.028	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Chlorophenol	ND		0.93	0.21	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Chlorophenyl phenyl ether	ND		0.93	0.074	ug/L		05/04/17 09:19	05/07/17 00:05	1
Chrysene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/07/17 00:05	1
Dibenz(a,h)anthracene	ND		0.18	0.025	ug/L		05/04/17 09:19	05/07/17 00:05	1
Dibenzofuran	ND		0.93	0.089	ug/L		05/04/17 09:19	05/07/17 00:05	1
1,2-Dichlorobenzene	ND		0.93	0.10	ug/L		05/04/17 09:19	05/07/17 00:05	1
1,3-Dichlorobenzene	ND		0.93	0.070	ug/L		05/04/17 09:19	05/07/17 00:05	1
1,4-Dichlorobenzene	ND		0.93	0.15	ug/L		05/04/17 09:19	05/07/17 00:05	1
3,3'-Dichlorobenzidine	ND		0.93	0.14	ug/L		05/04/17 09:19	05/07/17 00:05	1

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-12A-042717
Date Collected: 04/27/17 15:05
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.18	0.062	ug/L		05/04/17 09:19	05/07/17 00:05	1
Diethyl phthalate	ND		0.93	0.27	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,4-Dimethylphenol	ND		0.93	0.16	ug/L		05/04/17 09:19	05/07/17 00:05	1
Dimethyl phthalate	ND		0.93	0.17	ug/L		05/04/17 09:19	05/07/17 00:05	1
Di-n-butyl phthalate	**0.96**		0.93	0.22	ug/L		05/04/17 09:19	05/07/17 00:05	1
4,6-Dinitro-2-methylphenol	ND		4.6	1.4	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,4-Dinitrophenol	ND		4.6	2.3	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,4-Dinitrotoluene	ND		0.93	0.20	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,6-Dinitrotoluene	ND		0.93	0.13	ug/L		05/04/17 09:19	05/07/17 00:05	1
Di-n-octyl phthalate	ND		0.93	0.19	ug/L		05/04/17 09:19	05/07/17 00:05	1
Fluoranthene	ND		0.18	0.020	ug/L		05/04/17 09:19	05/07/17 00:05	1
Fluorene	ND		0.18	0.022	ug/L		05/04/17 09:19	05/07/17 00:05	1
Hexachlorobenzene	ND		0.18	0.056	ug/L		05/04/17 09:19	05/07/17 00:05	1
Hexachlorobutadiene	ND		0.18	0.087	ug/L		05/04/17 09:19	05/07/17 00:05	1
Hexachlorocyclopentadiene	ND		0.93	0.13	ug/L		05/04/17 09:19	05/07/17 00:05	1
Hexachloroethane	ND		0.93	0.13	ug/L		05/04/17 09:19	05/07/17 00:05	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.040	ug/L		05/04/17 09:19	05/07/17 00:05	1
Isophorone	ND		0.93	0.068	ug/L		05/04/17 09:19	05/07/17 00:05	1
1-Methylnaphthalene	ND		0.18	0.029	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Methylphenol	ND		0.93	0.17	ug/L		05/04/17 09:19	05/07/17 00:05	1
Methylphenol, 3 & 4	ND		0.93	0.19	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Nitroaniline	ND		4.6	0.62	ug/L		05/04/17 09:19	05/07/17 00:05	1
3-Nitroaniline	ND		4.6	0.75	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Nitroaniline	ND		4.6	0.72	ug/L		05/04/17 09:19	05/07/17 00:05	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/04/17 09:19	05/07/17 00:05	1
2-Nitrophenol	ND		0.93	0.10	ug/L		05/04/17 09:19	05/07/17 00:05	1
4-Nitrophenol	ND	*	4.6	0.74	ug/L		05/04/17 09:19	05/07/17 00:05	1
N-Nitrosodi-n-propylamine	ND		0.18	0.046	ug/L		05/04/17 09:19	05/07/17 00:05	1
N-Nitrosodiphenylamine	ND		0.93	0.11	ug/L		05/04/17 09:19	05/07/17 00:05	1
Pentachlorophenol	ND		0.93	0.46	ug/L		05/04/17 09:19	05/07/17 00:05	1
Phenanthrene	ND		0.18	0.038	ug/L		05/04/17 09:19	05/07/17 00:05	1
Phenol	ND		0.93	0.051	ug/L		05/04/17 09:19	05/07/17 00:05	1
Pyrene	ND		0.18	0.021	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,3,4,6-Tetrachlorophenol	ND		0.93	0.098	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,3,5,6-Tetrachlorophenol	ND		0.93	0.11	ug/L		05/04/17 09:19	05/07/17 00:05	1
1,2,4-Trichlorobenzene	ND		0.93	0.079	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,4,5-Trichlorophenol	ND		0.93	0.11	ug/L		05/04/17 09:19	05/07/17 00:05	1
2,4,6-Trichlorophenol	ND		0.93	0.28	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzoic acid	ND		4.6	1.5	ug/L		05/04/17 09:19	05/07/17 00:05	1
Benzyl alcohol	ND		0.93	0.18	ug/L		05/04/17 09:19	05/07/17 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*24 - 100*	*05/04/17 09:19*	*05/07/17 00:05*	*1*
2-Fluorophenol (Surr)	*58*		*20 - 100*	*05/04/17 09:19*	*05/07/17 00:05*	*1*
Nitrobenzene-d5 (Surr)	*78*		*25 - 105*	*05/04/17 09:19*	*05/07/17 00:05*	*1*
Phenol-d5 (Surr)	*64*		*21 - 100*	*05/04/17 09:19*	*05/07/17 00:05*	*1*
Terphenyl-d14 (Surr)	*35*		*20 - 124*	*05/04/17 09:19*	*05/07/17 00:05*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*22 - 118*	*05/04/17 09:19*	*05/07/17 00:05*	*1*

Client Sample ID: SUPE-W-12A-042717
Date Collected: 04/27/17 15:05
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.60	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total TCDD	ND		9.6	0.60	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,7,8-PeCDD	ND		48	0.24	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total PeCDD	ND		48	0.24	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,4,7,8-HxCDD	**0.66**	**J q B**	48	0.34	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,6,7,8-HxCDD	**3.5**	**J B**	48	0.33	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,7,8,9-HxCDD	**1.2**	**J q B**	48	0.32	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total HxCDD	**12**	**J q B**	48	0.33	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,4,6,7,8-HpCDD	**75**	**B**	48	0.54	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total HpCDD	**140**	**B**	48	0.54	pg/L		05/01/17 15:01	05/03/17 17:09	1
OCDD	**780**	**B**	96	0.13	pg/L		05/01/17 15:01	05/03/17 17:09	1
2,3,7,8-TCDF	ND		9.6	0.50	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total TCDF	**17**	**q**	9.6	0.50	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,7,8-PeCDF	**0.62**	**J**	48	0.36	pg/L		05/01/17 15:01	05/03/17 17:09	1
2,3,4,7,8-PeCDF	**0.56**	**J B**	48	0.35	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total PeCDF	**50**	**q B**	48	0.36	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,4,7,8-HxCDF	**4.4**	**J B**	48	1.1	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,6,7,8-HxCDF	**7.9**	**J I B**	48	1.1	pg/L		05/01/17 15:01	05/03/17 17:09	1
2,3,4,6,7,8-HxCDF	ND	q	48	1.2	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,7,8,9-HxCDF	ND		48	1.5	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total HxCDF	**110**	**I q B**	48	1.2	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,4,6,7,8-HpCDF	**26**	**J B**	48	0.70	pg/L		05/01/17 15:01	05/03/17 17:09	1
1,2,3,4,7,8,9-HpCDF	**3.8**	**J B**	48	0.95	pg/L		05/01/17 15:01	05/03/17 17:09	1
Total HpCDF	**100**	**B**	48	0.82	pg/L		05/01/17 15:01	05/03/17 17:09	1
OCDF	**75**	**J B**	96	0.17	pg/L		05/01/17 15:01	05/03/17 17:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,4,7,8-HxCDD	*71*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,6,7,8-HxCDD	*70*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*83*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-OCDD	*82*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-2,3,7,8-TCDF	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,7,8-PeCDF	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-2,3,4,7,8-PeCDF	*84*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,4,7,8-HxCDF	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,6,7,8-HxCDF	*72*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-2,3,4,6,7,8-HxCDF	*75*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,7,8,9-HxCDF	*77*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*74*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*
13C-OCDF	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 17:09*	*1*

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-18D-042617
Date Collected: 04/26/17 16:42
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.18	0.027	ug/L		05/03/17 08:33	05/08/17 19:39	1
Acenaphthylene	ND		0.18	0.020	ug/L		05/03/17 08:33	05/08/17 19:39	1
Anthracene	ND		0.18	0.018	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzo[a]anthracene	ND		0.18	0.034	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzo[a]pyrene	ND		0.18	0.026	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzo[b]fluoranthene	ND		0.18	0.045	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzo[g,h,i]perylene	ND		0.18	0.027	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzo[k]fluoranthene	ND		0.18	0.028	ug/L		05/03/17 08:33	05/08/17 19:39	1
Bis(2-chloroethoxy)methane	ND		0.93	0.12	ug/L		05/03/17 08:33	05/08/17 19:39	1
Bis(2-chloroethyl)ether	ND		0.18	0.029	ug/L		05/03/17 08:33	05/08/17 19:39	1
bis(chloroisopropyl) ether	ND		0.18	0.022	ug/L		05/03/17 08:33	05/08/17 19:39	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.41	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Bromophenyl phenyl ether	ND		0.93	0.11	ug/L		05/03/17 08:33	05/08/17 19:39	1
Butyl benzyl phthalate	ND		0.93	0.20	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Chloroaniline	ND		0.93	0.27	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Chloro-3-methylphenol	ND		0.93	0.16	ug/L		05/03/17 08:33	05/08/17 19:39	1
2-Chloronaphthalene	ND		0.18	0.028	ug/L		05/03/17 08:33	05/08/17 19:39	1
2-Chlorophenol	ND		0.93	0.21	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Chlorophenyl phenyl ether	ND		0.93	0.074	ug/L		05/03/17 08:33	05/08/17 19:39	1
Chrysene	ND		0.18	0.029	ug/L		05/03/17 08:33	05/08/17 19:39	1
Dibenz(a,h)anthracene	ND		0.18	0.025	ug/L		05/03/17 08:33	05/08/17 19:39	1
Dibenzofuran	ND		0.93	0.089	ug/L		05/03/17 08:33	05/08/17 19:39	1
1,2-Dichlorobenzene	ND		0.93	0.10	ug/L		05/03/17 08:33	05/08/17 19:39	1
1,3-Dichlorobenzene	ND		0.93	0.070	ug/L		05/03/17 08:33	05/08/17 19:39	1
1,4-Dichlorobenzene	ND		0.93	0.15	ug/L		05/03/17 08:33	05/08/17 19:39	1
3,3'-Dichlorobenzidine	ND		0.93	0.14	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4-Dichlorophenol	ND		0.18	0.062	ug/L		05/03/17 08:33	05/08/17 19:39	1
Diethyl phthalate	ND		0.93	0.27	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4-Dimethylphenol	ND		0.93	0.16	ug/L		05/03/17 08:33	05/08/17 19:39	1
Dimethyl phthalate	ND		0.93	0.17	ug/L		05/03/17 08:33	05/08/17 19:39	1
Di-n-butyl phthalate	ND		0.93	0.22	ug/L		05/03/17 08:33	05/08/17 19:39	1
4,6-Dinitro-2-methylphenol	ND		4.6	1.4	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4-Dinitrophenol	ND		4.6	2.3	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4-Dinitrotoluene	ND		0.93	0.20	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,6-Dinitrotoluene	ND		0.93	0.13	ug/L		05/03/17 08:33	05/08/17 19:39	1
Di-n-octyl phthalate	ND		0.93	0.19	ug/L		05/03/17 08:33	05/08/17 19:39	1
Fluoranthene	ND		0.18	0.020	ug/L		05/03/17 08:33	05/08/17 19:39	1
Fluorene	ND		0.18	0.022	ug/L		05/03/17 08:33	05/08/17 19:39	1
Hexachlorobenzene	ND		0.18	0.056	ug/L		05/03/17 08:33	05/08/17 19:39	1
Hexachlorobutadiene	ND		0.18	0.087	ug/L		05/03/17 08:33	05/08/17 19:39	1
Hexachlorocyclopentadiene	ND		0.93	0.13	ug/L		05/03/17 08:33	05/08/17 19:39	1
Hexachloroethane	ND		0.93	0.13	ug/L		05/03/17 08:33	05/08/17 19:39	1
Indeno[1,2,3-cd]pyrene	ND		0.18	0.040	ug/L		05/03/17 08:33	05/08/17 19:39	1
Isophorone	ND		0.93	0.068	ug/L		05/03/17 08:33	05/08/17 19:39	1
1-Methylnaphthalene	ND		0.18	0.029	ug/L		05/03/17 08:33	05/08/17 19:39	1
2-Methylnaphthalene	ND		0.18	0.018	ug/L		05/03/17 08:33	05/08/17 19:39	1
2-Methylphenol	ND		0.93	0.17	ug/L		05/03/17 08:33	05/08/17 19:39	1
Methylphenol, 3 & 4	ND		0.93	0.19	ug/L		05/03/17 08:33	05/08/17 19:39	1
Naphthalene	ND		0.18	0.021	ug/L		05/03/17 08:33	05/08/17 19:39	1

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

TestAmerica Job ID: 180-65736-1

Client Sample ID: SUPE-W-18D-042617
Date Collected: 04/26/17 16:42
Date Received: 04/28/17 09:00

Lab Sample ID: 180-65736-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		4.6	0.62	ug/L		05/03/17 08:33	05/08/17 19:39	1
3-Nitroaniline	ND		4.6	0.75	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Nitroaniline	ND		4.6	0.72	ug/L		05/03/17 08:33	05/08/17 19:39	1
Nitrobenzene	ND		1.9	0.14	ug/L		05/03/17 08:33	05/08/17 19:39	1
2-Nitrophenol	ND		0.93	0.10	ug/L		05/03/17 08:33	05/08/17 19:39	1
4-Nitrophenol	ND		4.6	0.74	ug/L		05/03/17 08:33	05/08/17 19:39	1
N-Nitrosodi-n-propylamine	ND		0.18	0.046	ug/L		05/03/17 08:33	05/08/17 19:39	1
N-Nitrosodiphenylamine	ND		0.93	0.11	ug/L		05/03/17 08:33	05/08/17 19:39	1
Pentachlorophenol	ND		0.93	0.46	ug/L		05/03/17 08:33	05/08/17 19:39	1
Phenanthrene	ND		0.18	0.038	ug/L		05/03/17 08:33	05/08/17 19:39	1
Phenol	ND		0.93	0.051	ug/L		05/03/17 08:33	05/08/17 19:39	1
Pyrene	ND		0.18	0.021	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,3,4,6-Tetrachlorophenol	ND		0.93	0.098	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,3,5,6-Tetrachlorophenol	ND		0.93	0.11	ug/L		05/03/17 08:33	05/08/17 19:39	1
1,2,4-Trichlorobenzene	ND		0.93	0.079	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4,5-Trichlorophenol	ND		0.93	0.11	ug/L		05/03/17 08:33	05/08/17 19:39	1
2,4,6-Trichlorophenol	ND		0.93	0.28	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzoic acid	ND		4.6	1.5	ug/L		05/03/17 08:33	05/08/17 19:39	1
Benzyl alcohol	ND		0.93	0.18	ug/L		05/03/17 08:33	05/08/17 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*24 - 100*	*05/03/17 08:33*	*05/08/17 19:39*	*1*
2-Fluorophenol (Surr)	*44*		*20 - 100*	*05/03/17 08:33*	*05/08/17 19:39*	*1*
Nitrobenzene-d5 (Surr)	*54*		*25 - 105*	*05/03/17 08:33*	*05/08/17 19:39*	*1*
Phenol-d5 (Surr)	*44*		*21 - 100*	*05/03/17 08:33*	*05/08/17 19:39*	*1*
Terphenyl-d14 (Surr)	*35*		*20 - 124*	*05/03/17 08:33*	*05/08/17 19:39*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*22 - 118*	*05/03/17 08:33*	*05/08/17 19:39*	*1*

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

Lab Sample ID: MB 240-277838/7
Matrix: Water
Analysis Batch: 277838

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.23	ug/L			05/06/17 13:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 13:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.24	ug/L			05/06/17 13:29	1
Benzene	ND		1.0	0.28	ug/L			05/06/17 13:29	1
Chloromethane	ND		1.0	0.43	ug/L			05/06/17 13:29	1
Ethylbenzene	ND		1.0	0.26	ug/L			05/06/17 13:29	1
Methyl tert-butyl ether	ND		1.0	0.27	ug/L			05/06/17 13:29	1
m-Xylene & p-Xylene	ND		2.0	0.24	ug/L			05/06/17 13:29	1
Naphthalene	ND		1.0	0.25	ug/L			05/06/17 13:29	1
n-Butylbenzene	ND		1.0	0.21	ug/L			05/06/17 13:29	1
N-Propylbenzene	ND		1.0	0.45	ug/L			05/06/17 13:29	1
o-Xylene	ND		1.0	0.28	ug/L			05/06/17 13:29	1
Styrene	ND		1.0	0.23	ug/L			05/06/17 13:29	1
Toluene	ND		1.0	0.23	ug/L			05/06/17 13:29	1
Xylenes, Total	ND		2.0	0.24	ug/L			05/06/17 13:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*		*05/06/17 13:29*	*1*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*		*05/06/17 13:29*	*1*
Dibromofluoromethane (Surr)	*84*		*69 - 124*		*05/06/17 13:29*	*1*
Toluene-d8 (Surr)	*103*		*73 - 120*		*05/06/17 13:29*	*1*

Lab Sample ID: LCS 240-277838/4
Matrix: Water
Analysis Batch: 277838

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	20.0	17.8		ug/L		89	64 - 147
1,2,4-Trimethylbenzene	20.0	20.7		ug/L		103	80 - 120
1,3,5-Trimethylbenzene	20.0	21.0		ug/L		105	79 - 120
Benzene	20.0	18.6		ug/L		93	79 - 120
Chloromethane	20.0	17.5		ug/L		87	59 - 124
Ethylbenzene	20.0	20.8		ug/L		104	80 - 120
Methyl tert-butyl ether	20.0	18.6		ug/L		93	73 - 120
m-Xylene & p-Xylene	20.0	20.2		ug/L		101	80 - 120
Naphthalene	20.0	22.0		ug/L		110	31 - 127
n-Butylbenzene	20.0	19.9		ug/L		100	60 - 137
N-Propylbenzene	20.0	21.7		ug/L		109	76 - 120
o-Xylene	20.0	20.3		ug/L		102	80 - 120
Styrene	20.0	20.4		ug/L		102	80 - 121
Toluene	20.0	21.0		ug/L		105	78 - 120
Xylenes, Total	40.0	40.5		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 138*
4-Bromofluorobenzene (Surr)	*97*		*69 - 120*
Dibromofluoromethane (Surr)	*88*		*69 - 124*

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

Lab Sample ID: LCS 240-277838/4
Matrix: Water
Analysis Batch: 277838

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	105		73 - 120

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

Lab Sample ID: MB 180-210043/1-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.029	ug/L		05/03/17 08:33	05/06/17 14:19	1
Acenaphthylene	ND		0.19	0.022	ug/L		05/03/17 08:33	05/06/17 14:19	1
Anthracene	ND		0.19	0.019	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzo[a]anthracene	ND		0.19	0.037	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzo[b]fluoranthene	ND		0.19	0.049	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzo[g,h,i]perylene	ND		0.19	0.029	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzo[k]fluoranthene	ND		0.19	0.030	ug/L		05/03/17 08:33	05/06/17 14:19	1
Bis(2-chloroethoxy)methane	ND		1.0	0.13	ug/L		05/03/17 08:33	05/06/17 14:19	1
Bis(2-chloroethyl)ether	ND		0.19	0.032	ug/L		05/03/17 08:33	05/06/17 14:19	1
bis(chloroisopropyl) ether	ND		0.19	0.024	ug/L		05/03/17 08:33	05/06/17 14:19	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/03/17 08:33	05/06/17 14:19	1
Butyl benzyl phthalate	ND		1.0	0.21	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Chloroaniline	ND		1.0	0.29	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Chloro-3-methylphenol	ND		1.0	0.17	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Chloronaphthalene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Chlorophenol	ND		1.0	0.23	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Chlorophenyl phenyl ether	ND		1.0	0.080	ug/L		05/03/17 08:33	05/06/17 14:19	1
Chrysene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/06/17 14:19	1
Dibenz(a,h)anthracene	ND		0.19	0.027	ug/L		05/03/17 08:33	05/06/17 14:19	1
Dibenzofuran	ND		1.0	0.097	ug/L		05/03/17 08:33	05/06/17 14:19	1
1,2-Dichlorobenzene	ND		1.0	0.11	ug/L		05/03/17 08:33	05/06/17 14:19	1
1,3-Dichlorobenzene	ND		1.0	0.075	ug/L		05/03/17 08:33	05/06/17 14:19	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L		05/03/17 08:33	05/06/17 14:19	1
3,3'-Dichlorobenzidine	ND		1.0	0.15	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4-Dichlorophenol	ND		0.19	0.067	ug/L		05/03/17 08:33	05/06/17 14:19	1
Diethyl phthalate	ND		1.0	0.30	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/03/17 08:33	05/06/17 14:19	1
Dimethyl phthalate	ND		1.0	0.18	ug/L		05/03/17 08:33	05/06/17 14:19	1
Di-n-butyl phthalate	ND		1.0	0.24	ug/L		05/03/17 08:33	05/06/17 14:19	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.6	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4-Dinitrophenol	ND		5.0	2.5	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4-Dinitrotoluene	ND		1.0	0.21	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,6-Dinitrotoluene	ND		1.0	0.14	ug/L		05/03/17 08:33	05/06/17 14:19	1
Di-n-octyl phthalate	ND		1.0	0.20	ug/L		05/03/17 08:33	05/06/17 14:19	1
Fluoranthene	ND		0.19	0.021	ug/L		05/03/17 08:33	05/06/17 14:19	1
Fluorene	ND		0.19	0.024	ug/L		05/03/17 08:33	05/06/17 14:19	1
Hexachlorobenzene	ND		0.19	0.061	ug/L		05/03/17 08:33	05/06/17 14:19	1

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

Lab Sample ID: MB 180-210043/1-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.19	0.094	ug/L		05/03/17 08:33	05/06/17 14:19	1
Hexachlorocyclopentadiene	ND		1.0	0.14	ug/L		05/03/17 08:33	05/06/17 14:19	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/03/17 08:33	05/06/17 14:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.043	ug/L		05/03/17 08:33	05/06/17 14:19	1
Isophorone	ND		1.0	0.074	ug/L		05/03/17 08:33	05/06/17 14:19	1
1-Methylnaphthalene	ND		0.19	0.031	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Methylphenol	ND		1.0	0.19	ug/L		05/03/17 08:33	05/06/17 14:19	1
Methylphenol, 3 & 4	ND		1.0	0.21	ug/L		05/03/17 08:33	05/06/17 14:19	1
Naphthalene	ND		0.19	0.023	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Nitroaniline	ND		5.0	0.67	ug/L		05/03/17 08:33	05/06/17 14:19	1
3-Nitroaniline	ND		5.0	0.81	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Nitroaniline	ND		5.0	0.77	ug/L		05/03/17 08:33	05/06/17 14:19	1
Nitrobenzene	ND		2.0	0.15	ug/L		05/03/17 08:33	05/06/17 14:19	1
2-Nitrophenol	ND		1.0	0.11	ug/L		05/03/17 08:33	05/06/17 14:19	1
4-Nitrophenol	ND		5.0	0.80	ug/L		05/03/17 08:33	05/06/17 14:19	1
N-Nitrosodi-n-propylamine	ND		0.19	0.050	ug/L		05/03/17 08:33	05/06/17 14:19	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/03/17 08:33	05/06/17 14:19	1
Pentachlorophenol	ND		1.0	0.50	ug/L		05/03/17 08:33	05/06/17 14:19	1
Phenanthrene	ND		0.19	0.042	ug/L		05/03/17 08:33	05/06/17 14:19	1
Phenol	ND		1.0	0.055	ug/L		05/03/17 08:33	05/06/17 14:19	1
Pyrene	ND		0.19	0.023	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.11	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,3,5,6-Tetrachlorophenol	ND		1.0	0.12	ug/L		05/03/17 08:33	05/06/17 14:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.085	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/03/17 08:33	05/06/17 14:19	1
2,4,6-Trichlorophenol	ND		1.0	0.30	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzoic acid	ND		5.0	1.6	ug/L		05/03/17 08:33	05/06/17 14:19	1
Benzyl alcohol	ND		1.0	0.20	ug/L		05/03/17 08:33	05/06/17 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*24 - 100*	*05/03/17 08:33*	*05/06/17 14:19*	*1*
2-Fluorophenol (Surr)	*59*		*20 - 100*	*05/03/17 08:33*	*05/06/17 14:19*	*1*
Nitrobenzene-d5 (Surr)	*57*		*25 - 105*	*05/03/17 08:33*	*05/06/17 14:19*	*1*
Phenol-d5 (Surr)	*57*		*21 - 100*	*05/03/17 08:33*	*05/06/17 14:19*	*1*
Terphenyl-d14 (Surr)	*63*		*20 - 124*	*05/03/17 08:33*	*05/06/17 14:19*	*1*
2,4,6-Tribromophenol (Surr)	*57*		*22 - 118*	*05/03/17 08:33*	*05/06/17 14:19*	*1*

Lab Sample ID: LCS 180-210043/2-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	20.0	12.7		ug/L		64	49 - 100
Acenaphthylene	20.0	12.7		ug/L		64	51 - 100
Anthracene	20.0	13.8		ug/L		69	53 - 100
Benzo[a]anthracene	20.0	13.2		ug/L		66	52 - 100
Benzo[a]pyrene	20.0	13.3		ug/L		66	51 - 100

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

Lab Sample ID: LCS 180-210043/2-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	20.0	11.6		ug/L		58	49 - 100
Benzo[g,h,i]perylene	20.0	13.0		ug/L		65	47 - 100
Benzo[k]fluoranthene	20.0	13.3		ug/L		66	49 - 100
Bis(2-chloroethoxy)methane	20.0	12.5		ug/L		62	49 - 100
Bis(2-chloroethyl)ether	20.0	12.8		ug/L		64	46 - 100
bis(chloroisopropyl) ether	20.0	12.0		ug/L		60	37 - 100
Bis(2-ethylhexyl) phthalate	20.0	13.8		ug/L		69	51 - 100
4-Bromophenyl phenyl ether	20.0	13.2		ug/L		66	53 - 100
Butyl benzyl phthalate	20.0	13.9		ug/L		69	50 - 100
4-Chloroaniline	20.0	12.2		ug/L		61	48 - 100
4-Chloro-3-methylphenol	20.0	12.8		ug/L		64	51 - 100
2-Chloronaphthalene	20.0	12.8		ug/L		64	50 - 100
2-Chlorophenol	20.0	13.4		ug/L		67	49 - 100
4-Chlorophenyl phenyl ether	20.0	12.9		ug/L		65	51 - 100
Chrysene	20.0	12.9		ug/L		65	51 - 100
Dibenz(a,h)anthracene	20.0	13.1		ug/L		66	49 - 100
Dibenzofuran	20.0	13.3		ug/L		66	50 - 100
1,2-Dichlorobenzene	20.0	12.8		ug/L		64	46 - 100
1,3-Dichlorobenzene	20.0	12.7		ug/L		63	45 - 100
1,4-Dichlorobenzene	20.0	12.6		ug/L		63	45 - 100
3,3'-Dichlorobenzidine	20.0	11.8		ug/L		59	42 - 100
2,4-Dichlorophenol	20.0	13.3		ug/L		67	52 - 100
Diethyl phthalate	20.0	13.5		ug/L		68	47 - 100
2,4-Dimethylphenol	20.0	12.9		ug/L		65	50 - 100
Dimethyl phthalate	20.0	13.0		ug/L		65	51 - 100
Di-n-butyl phthalate	20.0	14.8		ug/L		74	51 - 100
4,6-Dinitro-2-methylphenol	40.0	26.3		ug/L		66	50 - 100
2,4-Dinitrophenol	40.0	26.5		ug/L		66	40 - 102
2,4-Dinitrotoluene	20.0	13.9		ug/L		70	52 - 100
2,6-Dinitrotoluene	20.0	14.0		ug/L		70	54 - 100
Di-n-octyl phthalate	20.0	12.1		ug/L		61	48 - 100
Fluoranthene	20.0	13.8		ug/L		69	50 - 100
Fluorene	20.0	13.1		ug/L		65	50 - 100
Hexachlorobenzene	20.0	12.6		ug/L		63	51 - 100
Hexachlorobutadiene	20.0	12.6		ug/L		63	46 - 100
Hexachlorocyclopentadiene	20.0	11.5		ug/L		57	43 - 100
Hexachloroethane	20.0	12.7		ug/L		63	45 - 100
Indeno[1,2,3-cd]pyrene	20.0	13.2		ug/L		66	48 - 100
Isophorone	20.0	12.2		ug/L		61	48 - 100
1-Methylnaphthalene	20.0	13.1		ug/L		66	50 - 100
2-Methylnaphthalene	20.0	12.7		ug/L		64	49 - 100
2-Methylphenol	20.0	13.7		ug/L		68	48 - 100
Methylphenol, 3 & 4	20.0	13.8		ug/L		69	49 - 100
Naphthalene	20.0	13.2		ug/L		66	48 - 100
2-Nitroaniline	20.0	13.3		ug/L		67	47 - 102
3-Nitroaniline	20.0	13.8		ug/L		69	50 - 100
4-Nitroaniline	20.0	13.5		ug/L		67	43 - 101
Nitrobenzene	20.0	12.4		ug/L		62	47 - 100

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

Lab Sample ID: LCS 180-210043/2-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitrophenol	20.0	14.6		ug/L		73	52 - 100
4-Nitrophenol	40.0	25.2		ug/L		63	37 - 117
N-Nitrosodi-n-propylamine	20.0	12.7		ug/L		63	47 - 100
N-Nitrosodiphenylamine	20.0	13.1		ug/L		66	51 - 100
Pentachlorophenol	40.0	27.1		ug/L		68	41 - 100
Phenanthrene	20.0	13.1		ug/L		65	51 - 100
Phenol	20.0	12.8		ug/L		64	47 - 100
Pyrene	20.0	12.6		ug/L		63	49 - 100
2,3,4,6-Tetrachlorophenol	20.0	12.5		ug/L		63	50 - 100
1,2,4-Trichlorobenzene	20.0	12.9		ug/L		65	48 - 100
2,4,5-Trichlorophenol	20.0	13.4		ug/L		67	52 - 100
2,4,6-Trichlorophenol	20.0	13.6		ug/L		68	53 - 100
Benzoic acid	20.0	14.9		ug/L		74	34 - 104
Benzyl alcohol	20.0	12.8		ug/L		64	44 - 100

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*24 - 100*
2-Fluorophenol (Surr)	*59*		*20 - 100*
Nitrobenzene-d5 (Surr)	*55*		*25 - 105*
Phenol-d5 (Surr)	*58*		*21 - 100*
Terphenyl-d14 (Surr)	*56*		*20 - 124*
2,4,6-Tribromophenol (Surr)	*61*		*22 - 118*

Lab Sample ID: LCSD 180-210043/3-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210043

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	20.0	12.8		ug/L		64	49 - 100	1	15
Acenaphthylene	20.0	12.9		ug/L		65	51 - 100	2	15
Anthracene	20.0	13.7		ug/L		68	53 - 100	1	15
Benzo[a]anthracene	20.0	13.4		ug/L		67	52 - 100	2	15
Benzo[a]pyrene	20.0	13.6		ug/L		68	51 - 100	2	15
Benzo[b]fluoranthene	20.0	11.9		ug/L		60	49 - 100	3	15
Benzo[g,h,i]perylene	20.0	13.2		ug/L		66	47 - 100	1	15
Benzo[k]fluoranthene	20.0	13.5		ug/L		67	49 - 100	1	15
Bis(2-chloroethoxy)methane	20.0	12.8		ug/L		64	49 - 100	3	15
Bis(2-chloroethyl)ether	20.0	12.7		ug/L		64	46 - 100	1	15
bis(chloroisopropyl) ether	20.0	11.6		ug/L		58	37 - 100	3	15
Bis(2-ethylhexyl) phthalate	20.0	14.1		ug/L		71	51 - 100	2	15
4-Bromophenyl phenyl ether	20.0	13.2		ug/L		66	53 - 100	0	15
Butyl benzyl phthalate	20.0	13.9		ug/L		69	50 - 100	0	15
4-Chloroaniline	20.0	12.4		ug/L		62	48 - 100	2	15
4-Chloro-3-methylphenol	20.0	13.1		ug/L		66	51 - 100	2	15
2-Chloronaphthalene	20.0	13.0		ug/L		65	50 - 100	2	15
2-Chlorophenol	20.0	13.2		ug/L		66	49 - 100	2	15
4-Chlorophenyl phenyl ether	20.0	13.2		ug/L		66	51 - 100	2	15
Chrysene	20.0	13.4		ug/L		67	51 - 100	3	15

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

Lab Sample ID: LCSD 180-210043/3-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210043

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	20.0	13.6		ug/L		68	49 - 100	4	15
Dibenzofuran	20.0	13.3		ug/L		67	50 - 100	1	15
1,2-Dichlorobenzene	20.0	12.7		ug/L		64	46 - 100	1	15
1,3-Dichlorobenzene	20.0	12.4		ug/L		62	45 - 100	2	15
1,4-Dichlorobenzene	20.0	12.6		ug/L		63	45 - 100	1	15
3,3'-Dichlorobenzidine	20.0	12.2		ug/L		61	42 - 100	4	15
2,4-Dichlorophenol	20.0	13.6		ug/L		68	52 - 100	2	15
Diethyl phthalate	20.0	13.7		ug/L		68	47 - 100	1	15
2,4-Dimethylphenol	20.0	13.0		ug/L		65	50 - 100	1	15
Dimethyl phthalate	20.0	13.4		ug/L		67	51 - 100	2	15
Di-n-butyl phthalate	20.0	14.9		ug/L		75	51 - 100	1	15
4,6-Dinitro-2-methylphenol	40.0	26.5		ug/L		66	50 - 100	1	15
2,4-Dinitrophenol	40.0	27.4		ug/L		68	40 - 102	3	18
2,4-Dinitrotoluene	20.0	14.5		ug/L		72	52 - 100	4	15
2,6-Dinitrotoluene	20.0	14.4		ug/L		72	54 - 100	3	15
Di-n-octyl phthalate	20.0	12.4		ug/L		62	48 - 100	2	15
Fluoranthene	20.0	14.0		ug/L		70	50 - 100	1	15
Fluorene	20.0	13.4		ug/L		67	50 - 100	3	15
Hexachlorobenzene	20.0	12.9		ug/L		65	51 - 100	3	15
Hexachlorobutadiene	20.0	12.6		ug/L		63	46 - 100	0	15
Hexachlorocyclopentadiene	20.0	11.9		ug/L		60	43 - 100	4	15
Hexachloroethane	20.0	12.6		ug/L		63	45 - 100	1	15
Indeno[1,2,3-cd]pyrene	20.0	13.6		ug/L		68	48 - 100	3	15
Isophorone	20.0	12.5		ug/L		62	48 - 100	2	15
1-Methylnaphthalene	20.0	13.2		ug/L		66	50 - 100	0	15
2-Methylnaphthalene	20.0	13.1		ug/L		65	49 - 100	3	15
2-Methylphenol	20.0	13.5		ug/L		67	48 - 100	2	15
Methylphenol, 3 & 4	20.0	13.6		ug/L		68	49 - 100	1	15
Naphthalene	20.0	13.4		ug/L		67	48 - 100	1	15
2-Nitroaniline	20.0	13.5		ug/L		68	47 - 102	1	15
3-Nitroaniline	20.0	14.5		ug/L		72	50 - 100	5	15
4-Nitroaniline	20.0	13.6		ug/L		68	43 - 101	1	15
Nitrobenzene	20.0	12.6		ug/L		63	47 - 100	2	15
2-Nitrophenol	20.0	15.3		ug/L		76	52 - 100	4	15
4-Nitrophenol	40.0	25.3		ug/L		63	37 - 117	0	15
N-Nitrosodi-n-propylamine	20.0	12.4		ug/L		62	47 - 100	2	15
N-Nitrosodiphenylamine	20.0	13.0		ug/L		65	51 - 100	1	15
Pentachlorophenol	40.0	27.1		ug/L		68	41 - 100	0	15
Phenanthrene	20.0	13.2		ug/L		66	51 - 100	1	15
Phenol	20.0	13.0		ug/L		65	47 - 100	1	15
Pyrene	20.0	13.3		ug/L		67	49 - 100	5	15
2,3,4,6-Tetrachlorophenol	20.0	12.6		ug/L		63	50 - 100	1	15
1,2,4-Trichlorobenzene	20.0	12.8		ug/L		64	48 - 100	1	15
2,4,5-Trichlorophenol	20.0	13.9		ug/L		69	52 - 100	4	15
2,4,6-Trichlorophenol	20.0	14.3		ug/L		71	53 - 100	5	15
Benzoic acid	20.0	15.4		ug/L		77	34 - 104	3	17
Benzyl alcohol	20.0	12.9		ug/L		64	44 - 100	1	15

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

Lab Sample ID: LCSD 180-210043/3-A
Matrix: Water
Analysis Batch: 210409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210043

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*24 - 100*
2-Fluorophenol (Surr)	*60*		*20 - 100*
Nitrobenzene-d5 (Surr)	*57*		*25 - 105*
Phenol-d5 (Surr)	*57*		*21 - 100*
Terphenyl-d14 (Surr)	*57*		*20 - 124*
2,4,6-Tribromophenol (Surr)	*63*		*22 - 118*

Lab Sample ID: MB 180-210177/1-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 16:14	1
Acenaphthylene	ND		0.19	0.022	ug/L		05/04/17 09:19	05/06/17 16:14	1
Anthracene	ND		0.19	0.019	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzo[a]anthracene	ND		0.19	0.037	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzo[b]fluoranthene	ND		0.19	0.049	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzo[g,h,i]perylene	ND		0.19	0.029	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzo[k]fluoranthene	ND		0.19	0.030	ug/L		05/04/17 09:19	05/06/17 16:14	1
Bis(2-chloroethoxy)methane	ND		1.0	0.13	ug/L		05/04/17 09:19	05/06/17 16:14	1
Bis(2-chloroethyl)ether	ND		0.19	0.032	ug/L		05/04/17 09:19	05/06/17 16:14	1
bis(chloroisopropyl) ether	ND		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 16:14	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 16:14	1
Butyl benzyl phthalate	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Chloroaniline	ND		1.0	0.29	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Chloro-3-methylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Chloronaphthalene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Chlorophenol	ND		1.0	0.23	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Chlorophenyl phenyl ether	ND		1.0	0.080	ug/L		05/04/17 09:19	05/06/17 16:14	1
Chrysene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 16:14	1
Dibenz(a,h)anthracene	ND		0.19	0.027	ug/L		05/04/17 09:19	05/06/17 16:14	1
Dibenzofuran	ND		1.0	0.097	ug/L		05/04/17 09:19	05/06/17 16:14	1
1,2-Dichlorobenzene	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 16:14	1
1,3-Dichlorobenzene	ND		1.0	0.075	ug/L		05/04/17 09:19	05/06/17 16:14	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L		05/04/17 09:19	05/06/17 16:14	1
3,3'-Dichlorobenzidine	ND		1.0	0.15	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4-Dichlorophenol	ND		0.19	0.067	ug/L		05/04/17 09:19	05/06/17 16:14	1
Diethyl phthalate	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/04/17 09:19	05/06/17 16:14	1
Dimethyl phthalate	ND		1.0	0.18	ug/L		05/04/17 09:19	05/06/17 16:14	1
Di-n-butyl phthalate	ND		1.0	0.24	ug/L		05/04/17 09:19	05/06/17 16:14	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.6	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4-Dinitrophenol	ND		5.0	2.5	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4-Dinitrotoluene	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,6-Dinitrotoluene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 16:14	1
Di-n-octyl phthalate	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 16:14	1

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

Lab Sample ID: MB 180-210177/1-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.19	0.021	ug/L		05/04/17 09:19	05/06/17 16:14	1
Fluorene	ND		0.19	0.024	ug/L		05/04/17 09:19	05/06/17 16:14	1
Hexachlorobenzene	ND		0.19	0.061	ug/L		05/04/17 09:19	05/06/17 16:14	1
Hexachlorobutadiene	ND		0.19	0.094	ug/L		05/04/17 09:19	05/06/17 16:14	1
Hexachlorocyclopentadiene	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 16:14	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/04/17 09:19	05/06/17 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.043	ug/L		05/04/17 09:19	05/06/17 16:14	1
Isophorone	ND		1.0	0.074	ug/L		05/04/17 09:19	05/06/17 16:14	1
1-Methylnaphthalene	ND		0.19	0.031	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Methylphenol	ND		1.0	0.19	ug/L		05/04/17 09:19	05/06/17 16:14	1
Methylphenol, 3 & 4	ND		1.0	0.21	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Nitroaniline	ND		5.0	0.67	ug/L		05/04/17 09:19	05/06/17 16:14	1
3-Nitroaniline	ND		5.0	0.81	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Nitroaniline	ND		5.0	0.77	ug/L		05/04/17 09:19	05/06/17 16:14	1
Nitrobenzene	ND		2.0	0.15	ug/L		05/04/17 09:19	05/06/17 16:14	1
2-Nitrophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 16:14	1
4-Nitrophenol	ND		5.0	0.80	ug/L		05/04/17 09:19	05/06/17 16:14	1
N-Nitrosodi-n-propylamine	ND		0.19	0.050	ug/L		05/04/17 09:19	05/06/17 16:14	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 16:14	1
Pentachlorophenol	ND		1.0	0.50	ug/L		05/04/17 09:19	05/06/17 16:14	1
Phenanthrene	ND		0.19	0.042	ug/L		05/04/17 09:19	05/06/17 16:14	1
Phenol	ND		1.0	0.055	ug/L		05/04/17 09:19	05/06/17 16:14	1
Pyrene	ND		0.19	0.023	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.11	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,3,5,6-Tetrachlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 16:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.085	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/04/17 09:19	05/06/17 16:14	1
2,4,6-Trichlorophenol	ND		1.0	0.30	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzoic acid	ND		5.0	1.6	ug/L		05/04/17 09:19	05/06/17 16:14	1
Benzyl alcohol	ND		1.0	0.20	ug/L		05/04/17 09:19	05/06/17 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*24 - 100*	*05/04/17 09:19*	*05/06/17 16:14*	*1*
2-Fluorophenol (Surr)	*60*		*20 - 100*	*05/04/17 09:19*	*05/06/17 16:14*	*1*
Nitrobenzene-d5 (Surr)	*65*		*25 - 105*	*05/04/17 09:19*	*05/06/17 16:14*	*1*
Phenol-d5 (Surr)	*59*		*21 - 100*	*05/04/17 09:19*	*05/06/17 16:14*	*1*
Terphenyl-d14 (Surr)	*55*		*20 - 124*	*05/04/17 09:19*	*05/06/17 16:14*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*22 - 118*	*05/04/17 09:19*	*05/06/17 16:14*	*1*

Lab Sample ID: LCS 180-210177/2-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	20.0	12.4		ug/L		62	49 - 100
Acenaphthylene	20.0	11.5		ug/L		57	51 - 100
Anthracene	20.0	13.2		ug/L		66	53 - 100

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

Lab Sample ID: LCS 180-210177/2-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	20.0	12.7		ug/L		64	52 - 100
Benzo[a]pyrene	20.0	14.2		ug/L		71	51 - 100
Benzo[b]fluoranthene	20.0	14.1		ug/L		70	49 - 100
Benzo[g,h,i]perylene	20.0	13.1		ug/L		65	47 - 100
Benzo[k]fluoranthene	20.0	14.5		ug/L		72	49 - 100
Bis(2-chloroethoxy)methane	20.0	14.9		ug/L		74	49 - 100
Bis(2-chloroethyl)ether	20.0	15.0		ug/L		75	46 - 100
bis(chloroisopropyl) ether	20.0	17.2		ug/L		86	37 - 100
Bis(2-ethylhexyl) phthalate	20.0	13.8		ug/L		69	51 - 100
4-Bromophenyl phenyl ether	20.0	14.1		ug/L		70	53 - 100
Butyl benzyl phthalate	20.0	13.3		ug/L		67	50 - 100
4-Chloroaniline	20.0	12.8		ug/L		64	48 - 100
4-Chloro-3-methylphenol	20.0	14.3		ug/L		72	51 - 100
2-Chloronaphthalene	20.0	12.9		ug/L		65	50 - 100
2-Chlorophenol	20.0	13.0		ug/L		65	49 - 100
4-Chlorophenyl phenyl ether	20.0	12.8		ug/L		64	51 - 100
Chrysene	20.0	12.5		ug/L		62	51 - 100
Dibenz(a,h)anthracene	20.0	13.2		ug/L		66	49 - 100
Dibenzofuran	20.0	12.7		ug/L		64	50 - 100
1,2-Dichlorobenzene	20.0	13.7		ug/L		68	46 - 100
1,3-Dichlorobenzene	20.0	13.6		ug/L		68	45 - 100
1,4-Dichlorobenzene	20.0	13.6		ug/L		68	45 - 100
3,3'-Dichlorobenzidine	20.0	14.6		ug/L		73	42 - 100
2,4-Dichlorophenol	20.0	14.6		ug/L		73	52 - 100
Diethyl phthalate	20.0	13.5		ug/L		67	47 - 100
2,4-Dimethylphenol	20.0	15.0		ug/L		75	50 - 100
Dimethyl phthalate	20.0	13.5		ug/L		68	51 - 100
Di-n-butyl phthalate	20.0	13.3		ug/L		66	51 - 100
4,6-Dinitro-2-methylphenol	40.0	23.5		ug/L		59	50 - 100
2,4-Dinitrophenol	40.0	22.5		ug/L		56	40 - 102
2,4-Dinitrotoluene	20.0	14.0		ug/L		70	52 - 100
2,6-Dinitrotoluene	20.0	13.4		ug/L		67	54 - 100
Di-n-octyl phthalate	20.0	12.9		ug/L		64	48 - 100
Fluoranthene	20.0	14.5		ug/L		72	50 - 100
Fluorene	20.0	12.8		ug/L		64	50 - 100
Hexachlorobenzene	20.0	13.4		ug/L		67	51 - 100
Hexachlorobutadiene	20.0	15.1		ug/L		75	46 - 100
Hexachlorocyclopentadiene	20.0	11.4		ug/L		57	43 - 100
Hexachloroethane	20.0	13.9		ug/L		69	45 - 100
Indeno[1,2,3-cd]pyrene	20.0	13.6		ug/L		68	48 - 100
Isophorone	20.0	14.7		ug/L		74	48 - 100
1-Methylnaphthalene	20.0	13.0		ug/L		65	50 - 100
2-Methylnaphthalene	20.0	12.6		ug/L		63	49 - 100
2-Methylphenol	20.0	12.9		ug/L		64	48 - 100
Methylphenol, 3 & 4	20.0	13.1		ug/L		65	49 - 100
2-Nitroaniline	20.0	15.7		ug/L		78	47 - 102
3-Nitroaniline	20.0	12.5		ug/L		63	50 - 100
4-Nitroaniline	20.0	12.5		ug/L		62	43 - 101

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

Lab Sample ID: LCS 180-210177/2-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrobenzene	20.0	17.2		ug/L		86	47 - 100
2-Nitrophenol	20.0	13.2		ug/L		66	52 - 100
4-Nitrophenol	40.0	33.5		ug/L		84	37 - 117
N-Nitrosodi-n-propylamine	20.0	14.4		ug/L		72	47 - 100
N-Nitrosodiphenylamine	20.0	12.5		ug/L		62	51 - 100
Pentachlorophenol	40.0	25.4		ug/L		64	41 - 100
Phenanthrene	20.0	13.4		ug/L		67	51 - 100
Phenol	20.0	14.4		ug/L		72	47 - 100
Pyrene	20.0	13.3		ug/L		66	49 - 100
2,3,4,6-Tetrachlorophenol	20.0	13.6		ug/L		68	50 - 100
1,2,4-Trichlorobenzene	20.0	14.5		ug/L		72	48 - 100
2,4,5-Trichlorophenol	20.0	14.2		ug/L		71	52 - 100
2,4,6-Trichlorophenol	20.0	14.1		ug/L		70	53 - 100
Benzoic acid	20.0	12.3		ug/L		62	34 - 104
Benzyl alcohol	20.0	14.2		ug/L		71	44 - 100

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*24 - 100*
2-Fluorophenol (Surr)	*67*		*20 - 100*
Nitrobenzene-d5 (Surr)	*73*		*25 - 105*
Phenol-d5 (Surr)	*65*		*21 - 100*
Terphenyl-d14 (Surr)	*57*		*20 - 124*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 118*

Lab Sample ID: LCSD 180-210177/3-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210177

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	20.0	11.0		ug/L		55	49 - 100	12	15
Acenaphthylene	20.0	10.3		ug/L		52	51 - 100	11	15
Anthracene	20.0	11.8		ug/L		59	53 - 100	11	15
Benzo[a]anthracene	20.0	11.4		ug/L		57	52 - 100	11	15
Benzo[a]pyrene	20.0	12.5		ug/L		63	51 - 100	12	15
Benzo[b]fluoranthene	20.0	12.0	*	ug/L		60	49 - 100	16	15
Benzo[g,h,i]perylene	20.0	11.4		ug/L		57	47 - 100	14	15
Benzo[k]fluoranthene	20.0	13.0		ug/L		65	49 - 100	11	15
Bis(2-chloroethoxy)methane	20.0	13.2		ug/L		66	49 - 100	12	15
Bis(2-chloroethyl)ether	20.0	13.4		ug/L		67	46 - 100	11	15
bis(chloroisopropyl) ether	20.0	15.1		ug/L		75	37 - 100	13	15
Bis(2-ethylhexyl) phthalate	20.0	12.4		ug/L		62	51 - 100	11	15
4-Bromophenyl phenyl ether	20.0	12.7		ug/L		63	53 - 100	10	15
Butyl benzyl phthalate	20.0	12.0		ug/L		60	50 - 100	10	15
4-Chloroaniline	20.0	11.5		ug/L		58	48 - 100	11	15
4-Chloro-3-methylphenol	20.0	12.6		ug/L		63	51 - 100	13	15
2-Chloronaphthalene	20.0	11.7		ug/L		59	50 - 100	10	15
2-Chlorophenol	20.0	11.6		ug/L		58	49 - 100	12	15
4-Chlorophenyl phenyl ether	20.0	11.4		ug/L		57	51 - 100	11	15

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

Lab Sample ID: LCSD 180-210177/3-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210177

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	20.0	11.3		ug/L		56	51 - 100	10	15
Dibenz(a,h)anthracene	20.0	11.5		ug/L		57	49 - 100	14	15
Dibenzofuran	20.0	11.4		ug/L		57	50 - 100	11	15
1,2-Dichlorobenzene	20.0	12.4		ug/L		62	46 - 100	10	15
1,3-Dichlorobenzene	20.0	12.3		ug/L		62	45 - 100	10	15
1,4-Dichlorobenzene	20.0	12.2		ug/L		61	45 - 100	11	15
3,3'-Dichlorobenzidine	20.0	13.1		ug/L		65	42 - 100	11	15
2,4-Dichlorophenol	20.0	13.2		ug/L		66	52 - 100	10	15
Diethyl phthalate	20.0	11.6		ug/L		58	47 - 100	15	15
2,4-Dimethylphenol	20.0	13.3		ug/L		66	50 - 100	12	15
Dimethyl phthalate	20.0	12.2		ug/L		61	51 - 100	10	15
Di-n-butyl phthalate	20.0	11.7		ug/L		58	51 - 100	13	15
4,6-Dinitro-2-methylphenol	40.0	22.5		ug/L		56	50 - 100	4	15
2,4-Dinitrophenol	40.0	20.4		ug/L		51	40 - 102	10	18
2,4-Dinitrotoluene	20.0	12.4		ug/L		62	52 - 100	12	15
2,6-Dinitrotoluene	20.0	12.3		ug/L		61	54 - 100	9	15
Di-n-octyl phthalate	20.0	11.4		ug/L		57	48 - 100	12	15
Fluoranthene	20.0	12.8		ug/L		64	50 - 100	12	15
Fluorene	20.0	11.1		ug/L		55	50 - 100	14	15
Hexachlorobenzene	20.0	12.1		ug/L		61	51 - 100	10	15
Hexachlorobutadiene	20.0	13.3		ug/L		67	46 - 100	12	15
Hexachlorocyclopentadiene	20.0	10.4		ug/L		52	43 - 100	9	15
Hexachloroethane	20.0	12.4		ug/L		62	45 - 100	11	15
Indeno[1,2,3-cd]pyrene	20.0	11.8		ug/L		59	48 - 100	14	15
Isophorone	20.0	13.2		ug/L		66	48 - 100	11	15
1-Methylnaphthalene	20.0	11.7		ug/L		59	50 - 100	10	15
2-Methylnaphthalene	20.0	11.3		ug/L		56	49 - 100	11	15
2-Methylphenol	20.0	11.8		ug/L		59	48 - 100	9	15
Methylphenol, 3 & 4	20.0	11.5		ug/L		58	49 - 100	13	15
2-Nitroaniline	20.0	13.9		ug/L		69	47 - 102	12	15
3-Nitroaniline	20.0	11.2		ug/L		56	50 - 100	11	15
4-Nitroaniline	20.0	11.4		ug/L		57	43 - 101	9	15
Nitrobenzene	20.0	15.3		ug/L		77	47 - 100	11	15
2-Nitrophenol	20.0	12.0		ug/L		60	52 - 100	9	15
4-Nitrophenol	40.0	28.3	*	ug/L		71	37 - 117	17	15
N-Nitrosodi-n-propylamine	20.0	12.9		ug/L		64	47 - 100	11	15
N-Nitrosodiphenylamine	20.0	11.4		ug/L		57	51 - 100	9	15
Pentachlorophenol	40.0	23.1		ug/L		58	41 - 100	10	15
Phenanthrene	20.0	11.9		ug/L		59	51 - 100	12	15
Phenol	20.0	12.7		ug/L		63	47 - 100	13	15
Pyrene	20.0	12.0		ug/L		60	49 - 100	10	15
2,3,4,6-Tetrachlorophenol	20.0	12.2		ug/L		61	50 - 100	12	15
1,2,4-Trichlorobenzene	20.0	13.0		ug/L		65	48 - 100	11	15
2,4,5-Trichlorophenol	20.0	12.5		ug/L		62	52 - 100	13	15
2,4,6-Trichlorophenol	20.0	12.7		ug/L		64	53 - 100	10	15
Benzoic acid	20.0	11.6		ug/L		58	34 - 104	6	17
Benzyl alcohol	20.0	12.6		ug/L		63	44 - 100	11	15

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

Lab Sample ID: LCSD 180-210177/3-A
Matrix: Water
Analysis Batch: 210324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210177

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*24 - 100*
2-Fluorophenol (Surr)	*58*		*20 - 100*
Nitrobenzene-d5 (Surr)	*65*		*25 - 105*
Phenol-d5 (Surr)	*58*		*21 - 100*
Terphenyl-d14 (Surr)	*51*		*20 - 124*
2,4,6-Tribromophenol (Surr)	*49*		*22 - 118*

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

Lab Sample ID: MB 140-10937/13-A
Matrix: Water
Analysis Batch: 10968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10937

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.54	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total TCDD	ND		10	0.54	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,7,8-PeCDD	1.69	J q	50	0.82	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total PeCDD	3.40	J q	50	0.82	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,4,7,8-HxCDD	3.88	J	50	0.20	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,6,7,8-HxCDD	4.28	J	50	0.21	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,7,8,9-HxCDD	4.49	J	50	0.19	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total HxCDD	25.1	J q	50	0.20	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,4,6,7,8-HpCDD	6.63	J	50	0.53	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total HpCDD	9.75	J	50	0.53	pg/L		05/01/17 15:01	05/03/17 01:54	1
OCDD	17.1	J	100	0.31	pg/L		05/01/17 15:01	05/03/17 01:54	1
2,3,7,8-TCDF	ND		10	0.34	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total TCDF	ND		10	0.34	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,7,8-PeCDF	ND		50	1.0	pg/L		05/01/17 15:01	05/03/17 01:54	1
2,3,4,7,8-PeCDF	2.85	J	50	0.92	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total PeCDF	2.85	J	50	0.97	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,4,7,8-HxCDF	3.05	J q	50	0.20	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,6,7,8-HxCDF	3.42	J	50	0.20	pg/L		05/01/17 15:01	05/03/17 01:54	1
2,3,4,6,7,8-HxCDF	4.31	J q	50	0.22	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,7,8,9-HxCDF	4.99	J q	50	0.26	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total HxCDF	19.0	J q	50	0.22	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,4,6,7,8-HpCDF	6.34	J	50	0.14	pg/L		05/01/17 15:01	05/03/17 01:54	1
1,2,3,4,7,8,9-HpCDF	6.28	J	50	0.19	pg/L		05/01/17 15:01	05/03/17 01:54	1
Total HpCDF	12.6	J	50	0.16	pg/L		05/01/17 15:01	05/03/17 01:54	1
OCDF	14.8	J	100	0.13	pg/L		05/01/17 15:01	05/03/17 01:54	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-1,2,3,7,8-PeCDD	*91*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-1,2,3,4,7,8-HxCDD	*86*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-1,2,3,6,7,8-HxCDD	*81*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*87*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-OCDD	*80*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*
13C-2,3,7,8-TCDF	*88*		*40 - 135*	*05/01/17 15:01*	*05/03/17 01:54*	*1*

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

Lab Sample ID: MB 140-10937/13-A
Matrix: Water
Analysis Batch: 10968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10937

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,7,8-PeCDF	88		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-2,3,4,7,8-PeCDF	88		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-1,2,3,4,7,8-HxCDF	84		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-1,2,3,6,7,8-HxCDF	77		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-2,3,4,6,7,8-HxCDF	82		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-1,2,3,7,8,9-HxCDF	83		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-1,2,3,4,6,7,8-HpCDF	74		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-1,2,3,4,7,8,9-HpCDF	79		40 - 135	05/01/17 15:01	05/03/17 01:54	1
13C-OCDF	75		40 - 135	05/01/17 15:01	05/03/17 01:54	1

Lab Sample ID: LCS 140-10937/14-A
Matrix: Water
Analysis Batch: 10968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	187		pg/L		93	77 - 127
1,2,3,7,8-PeCDD	1000	952		pg/L		95	78 - 128
1,2,3,4,7,8-HxCDD	1000	958		pg/L		96	73 - 123
1,2,3,6,7,8-HxCDD	1000	935		pg/L		93	72 - 127
1,2,3,7,8,9-HxCDD	1000	1030		pg/L		103	76 - 126
1,2,3,4,6,7,8-HpCDD	1000	910		pg/L		91	73 - 123
OCDD	2000	1820		pg/L		91	75 - 125
2,3,7,8-TCDF	200	197		pg/L		98	74 - 124
1,2,3,7,8-PeCDF	1000	886		pg/L		89	74 - 124
2,3,4,7,8-PeCDF	1000	941		pg/L		94	74 - 124
1,2,3,4,7,8-HxCDF	1000	933		pg/L		93	75 - 125
1,2,3,6,7,8-HxCDF	1000	898		pg/L		90	75 - 125
2,3,4,6,7,8-HxCDF	1000	913		pg/L		91	76 - 126
1,2,3,7,8,9-HxCDF	1000	925		pg/L		93	76 - 126
1,2,3,4,6,7,8-HpCDF	1000	949		pg/L		95	71 - 121
1,2,3,4,7,8,9-HpCDF	1000	939		pg/L		94	73 - 123
OCDF	2000	1700		pg/L		85	68 - 132

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C-2,3,7,8-TCDD	79		40 - 135
13C-1,2,3,7,8-PeCDD	83		40 - 135
13C-1,2,3,4,7,8-HxCDD	78		40 - 135
13C-1,2,3,6,7,8-HxCDD	76		40 - 135
13C-1,2,3,4,6,7,8-HpCDD	86		40 - 135
13C-OCDD	79		40 - 135
13C-2,3,7,8-TCDF	77		40 - 135
13C-1,2,3,7,8-PeCDF	80		40 - 135
13C-2,3,4,7,8-PeCDF	79		40 - 135
13C-1,2,3,4,7,8-HxCDF	79		40 - 135
13C-1,2,3,6,7,8-HxCDF	75		40 - 135
13C-2,3,4,6,7,8-HxCDF	76		40 - 135
13C-1,2,3,7,8,9-HxCDF	79		40 - 135
13C-1,2,3,4,6,7,8-HpCDF	72		40 - 135

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

Lab Sample ID: LCS 140-10937/14-A
Matrix: Water
Analysis Batch: 10968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10937

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C-1,2,3,4,7,8,9-HpCDF	78		40 - 135
13C-OCDF	77		40 - 135

GC/MS VOA

Analysis Batch: 277838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-1	SUPE-TB-02-042717	Total/NA	Water	8260C	
180-65736-2	SUPE-W-28C-042717	Total/NA	Water	8260C	
180-65736-3	SUPE-W-12CR-042717	Total/NA	Water	8260C	
180-65736-4	SUPE-W-30A-042717	Total/NA	Water	8260C	
180-65736-5	SUPE-W-10AR2-042717	Total/NA	Water	8260C	
180-65736-6	SUPE-EB-02-042717	Total/NA	Water	8260C	
180-65736-7	SUPE-M-99A-042717	Total/NA	Water	8260C	
180-65736-8	SUPE-TB-01-042617	Total/NA	Water	8260C	
180-65736-9	SUPE-W-30C-042617	Total/NA	Water	8260C	
180-65736-10	SUPE-EB-01-042617	Total/NA	Water	8260C	
180-65736-11	SUPE-W-06A-042717	Total/NA	Water	8260C	
180-65736-12	SUPE-W-06C-042717	Total/NA	Water	8260C	
180-65736-13	SUPE-W-12A-042717	Total/NA	Water	8260C	
MB 240-277838/7	Method Blank	Total/NA	Water	8260C	
LCS 240-277838/4	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 210043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-9	SUPE-W-30C-042617	Total/NA	Water	3520C	
180-65736-10	SUPE-EB-01-042617	Total/NA	Water	3520C	
180-65736-14	SUPE-W-18D-042617	Total/NA	Water	3520C	
MB 180-210043/1-A	Method Blank	Total/NA	Water	3520C	
LCS 180-210043/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-210043/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 210177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-2	SUPE-W-28C-042717	Total/NA	Water	3520C	
180-65736-3	SUPE-W-12CR-042717	Total/NA	Water	3520C	
180-65736-4	SUPE-W-30A-042717	Total/NA	Water	3520C	
180-65736-5	SUPE-W-10AR2-042717	Total/NA	Water	3520C	
180-65736-6	SUPE-EB-02-042717	Total/NA	Water	3520C	
180-65736-7	SUPE-M-99A-042717	Total/NA	Water	3520C	
180-65736-11	SUPE-W-06A-042717	Total/NA	Water	3520C	
180-65736-12	SUPE-W-06C-042717	Total/NA	Water	3520C	
180-65736-13	SUPE-W-12A-042717	Total/NA	Water	3520C	
MB 180-210177/1-A	Method Blank	Total/NA	Water	3520C	
LCS 180-210177/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-210177/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 210324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-2	SUPE-W-28C-042717	Total/NA	Water	8270D LL	210177
180-65736-3	SUPE-W-12CR-042717	Total/NA	Water	8270D LL	210177
180-65736-4	SUPE-W-30A-042717	Total/NA	Water	8270D LL	210177
180-65736-5	SUPE-W-10AR2-042717	Total/NA	Water	8270D LL	210177
180-65736-6	SUPE-EB-02-042717	Total/NA	Water	8270D LL	210177
180-65736-7	SUPE-M-99A-042717	Total/NA	Water	8270D LL	210177

GC/MS Semi VOA (Continued)

Analysis Batch: 210324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-11	SUPE-W-06A-042717	Total/NA	Water	8270D LL	210177
180-65736-12	SUPE-W-06C-042717	Total/NA	Water	8270D LL	210177
180-65736-13	SUPE-W-12A-042717	Total/NA	Water	8270D LL	210177
MB 180-210177/1-A	Method Blank	Total/NA	Water	8270D LL	210177
LCS 180-210177/2-A	Lab Control Sample	Total/NA	Water	8270D LL	210177
LCSD 180-210177/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	210177

Analysis Batch: 210409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-210043/1-A	Method Blank	Total/NA	Water	8270D LL	210043
LCS 180-210043/2-A	Lab Control Sample	Total/NA	Water	8270D LL	210043
LCSD 180-210043/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	210043

Analysis Batch: 210526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-9	SUPE-W-30C-042617	Total/NA	Water	8270D LL	210043
180-65736-10	SUPE-EB-01-042617	Total/NA	Water	8270D LL	210043
180-65736-14	SUPE-W-18D-042617	Total/NA	Water	8270D LL	210043

Specialty Organics

Prep Batch: 10937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-2	SUPE-W-28C-042717	Total/NA	Water	8290	
180-65736-3	SUPE-W-12CR-042717	Total/NA	Water	8290	
180-65736-4	SUPE-W-30A-042717	Total/NA	Water	8290	
180-65736-5	SUPE-W-10AR2-042717	Total/NA	Water	8290	
180-65736-6	SUPE-EB-02-042717	Total/NA	Water	8290	
180-65736-7	SUPE-M-99A-042717	Total/NA	Water	8290	
180-65736-9	SUPE-W-30C-042617	Total/NA	Water	8290	
180-65736-10	SUPE-EB-01-042617	Total/NA	Water	8290	
180-65736-11	SUPE-W-06A-042717	Total/NA	Water	8290	
180-65736-12	SUPE-W-06C-042717	Total/NA	Water	8290	
180-65736-13	SUPE-W-12A-042717	Total/NA	Water	8290	
MB 140-10937/13-A	Method Blank	Total/NA	Water	8290	
LCS 140-10937/14-A	Lab Control Sample	Total/NA	Water	8290	

Analysis Batch: 10968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-2	SUPE-W-28C-042717	Total/NA	Water	8290	10937
180-65736-3	SUPE-W-12CR-042717	Total/NA	Water	8290	10937
180-65736-4	SUPE-W-30A-042717	Total/NA	Water	8290	10937
180-65736-5	SUPE-W-10AR2-042717	Total/NA	Water	8290	10937
180-65736-6	SUPE-EB-02-042717	Total/NA	Water	8290	10937
MB 140-10937/13-A	Method Blank	Total/NA	Water	8290	10937
LCS 140-10937/14-A	Lab Control Sample	Total/NA	Water	8290	10937

Analysis Batch: 10980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-7	SUPE-M-99A-042717	Total/NA	Water	8290	10937

Specialty Organics (Continued)

Analysis Batch: 10980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-65736-9	SUPE-W-30C-042617	Total/NA	Water	8290	10937
180-65736-10	SUPE-EB-01-042617	Total/NA	Water	8290	10937
180-65736-11	SUPE-W-06A-042717	Total/NA	Water	8290	10937
180-65736-12	SUPE-W-06C-042717	Total/NA	Water	8290	10937
180-65736-13	SUPE-W-12A-042717	Total/NA	Water	8290	10937

FTS Field & Technical Services, LLC

CHAIN OF CUSTODY RECORD/LAB REQUEST FOR

180-65736 Chain of Custody

REF.# 33

33

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 554-4421
Laboratory:	TAPIT		Carnegie, PA 15106		nbachik.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha	8270C_SVOC (less naphtha)														Notes:
				Preservative	HCL	None														
				Total Bottle Count																
04/27/2017	0910	GW	SUPE-TB-02-042717	1	1	0														
04/27/2017	0910	GW	SUPE-W-28C-042717	5	3	2														
04/27/2017	1112	GW	SUPE-W-12CR-042717	5	3	2														
04/27/2017	1243	GW	SUPE-W-30A-042717	5	3	2														
04/27/2017	1451	GW	SUPE-W-10AR2-042717	5	3	2														
04/27/2017	1556	GW	SUPE-EB-02-042717	5	3	2														
04/27/2017	2100	GW	SUPE-M-99A-042717	5	3	2														

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Nathan Bachik	Signature: Debbie Watson	Signature:	Signature:	☐ Rush
Printed Name: Nathan Bachik	Printed Name: Debbie Watson	Printed Name:	Printed Name:	
Firm: FTS	Firm: TAP	Firm	Firm	☒ Standard
Date/Time: 04/27/2017 1625	Date/Time: 4-28-17 9:00	Date/Time:	Date/Time:	

Page 1 of 1

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 101524

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 207-0014
Laboratory:	TAPIT		Carnegie, PA 15106		jlexie.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha	8270C_SVOC (less naphtha)														
				Preservative	HCL	None														
				Total Bottle Count																Notes:
04/26/2017	0000	GW	SUPE-TB-01-042617	2	2	0														
04/26/2017	1638	GW	SUPE-W-30C-042617	5	3	2														
04/26/2017	1715	GW	SUPE-EB-01-042617	5	3	2														

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature: Debbie Watson	Signature:	Signature:	☐ Rush
Printed Name: Jena Lexie	Printed Name: Debbie Watson	Printed Name:	Printed Name:	
Firm FTS	Firm TAP	Firm	Firm	☒ Standard
Date/Time: 04/26/2017 1726	Date/Time: 4-28-17 9:00	Date/Time:	Date/Time:	

Page 1 of 1

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 101527

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 207-0014
Laboratory:	TAPIT		Carnegie, PA 15106		jlexie.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8260B_VOA+naphtha	8270C_SVOC (less naphtha)															Notes:
				Preservative	HCL	None															
				Total Bottle Count																	
04/27/2017	1004	GW	SUPE-W-06A-042717	5	3	2															
04/27/2017	1243	GW	SUPE-W-06C-042717	5	3	2															
04/27/2017	1505	GW	SUPE-W-12A-042717	5	3	2															

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature: Debbie Watson	Signature:	Signature:	☐ Rush
Printed Name: Jena Lexie	Printed Name: Debbie Watson	Printed Name:	Printed Name:	
Firm FTS	Firm TAP	Firm	Firm	☒ Standard
Date/Time: 04/27/2017 1622	Date/Time: 4-28-17 9:00	Date/Time:	Date/Time:	

Page 1 of 1

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 30

30

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 554-4421
Laboratory:	TAPIT		Carnegie, PA 15106		nbachik.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8270C_SVOC+naphtha																Notes:
				Preservative	None																
				Total Bottle Count																	
04/26/2017	1642	GW	SUPE-W-18D-042617	2	2																

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Nathan Bachik	Signature: Debbie Watson	Signature:	Signature:	[ ] Rush
Printed Name: Nathan Bachik	Printed Name: Debbie Watson	Printed Name:	Printed Name:	
Firm: FTS	Firm: TAP	Firm	Firm	[X] Standard
Date/Time: 04/26/2017 1714	Date/Time: 4-28-17 9:00	Date/Time:	Date/Time:	

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FTS Field & Technical Services, LLC

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 34

34

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 554-4421
Laboratory:	TAKNOX		Carnegie, PA 15106		nbachik.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans															Notes:
				Preservative	None															
				Total Bottle Count																
04/27/2017	0910	GW	SUPE-W-28C-042717	2	2															
04/27/2017	1112	GW	SUPE-W-12CR-042717	2	2															
04/27/2017	1243	GW	SUPE-W-30A-042717	2	2															
04/27/2017	1451	GW	SUPE-W-10AR2-042717	2	2															
04/27/2017	1556	GW	SUPE-EB-02-042717	2	2															
04/27/2017	2100	GW	SUPE-M-99A-042717	2	2															

CUSTODY SEALS INTACT
RECEIVED AT AT 0.1, 0.8/0.1, 0.8°C
ON 4.28.17
2 COOLERS FEDEX # 7863 8631 1363
7863 8650 5254

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature: Nathan Bachik	Signature: Bryan Dambeau	Signature:	Signature:	☐ Rush
Printed Name: Nathan Bachik	Printed Name: BRYAN DAMBEAU	Printed Name:	Printed Name:	
Firm: FTS	Firm: TA KNOX	Firm	Firm	☒ Standard
Date/Time: 04/27/2017 1625	Date/Time: 4.28.17 10:00	Date/Time:	Date/Time:	

Page 1 of 1

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 101526

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 207-0014
Laboratory:	TAKNOX		Carnegie, PA 15106		jlexie.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans																Notes:
				Preservative	None																
				Total Bottle Count																	
04/27/2017	1004	GW	SUPE-W-06A-042717	2	2	0															
04/27/2017	1243	GW	SUPE-W-06C-042717	2	2	0															
04/27/2017	1505	GW	SUPE-W-12A-042717	2	2	0															

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Jena Lexie	Printed Name:	Printed Name:	Printed Name:	
Firm FTS	Firm TA KNOX	Firm	Firm	☒ Standard
Date/Time: 04/27/2017 1622	Date/Time: 4-28-17 10:00	Date/Time:	Date/Time:	

CHAIN OF CUSTODY RECORD/LABORATORY ANALYSIS REQUEST FORM

REF.# 101523

Project Name:	Superior 2017 1SA Sampling	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0556-17	Address:	200 Third Avenue	Contact:	(724) 207-0014
Laboratory:	TAKNOX		Carnegie, PA 15106		jlexie.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	Superior 2017 1SA Sampling_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	8290_Dioxins/Furans																Notes:
				Preservative	None																
				Total Bottle Count																	
04/26/2017	1638	GW	SUPE-W-30C-042617	2	2	0															
04/26/2017	1715	GW	SUPE-EB-01-042617	2	2	0															

Relinquished by:	Received by:	Relinquished by:	Received by:	Turnaround Requirements
Signature:	Signature:	Signature:	Signature:	☐ Rush
Printed Name: Jena Lexie	Printed Name:	Printed Name:	Printed Name:	
Firm FTS	Firm TA KNOX	Firm	Firm	☒ Standard
Date/Time: 04/26/2017 1726	Date/Time: 4-26-17 10:00	Date/Time:	Date/Time:	

Login Sample Receipt Checklist

Client: Field & Technical Services LLC

Job Number: 180-65736-1

Login Number: 65736
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

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