Technical Memorandum

Date: Monday, December 30, 2019

Project: Paducah City Block Parcel – Preliminary Site Investigation

To: Ms. Katie Axt – Principal Planner – City of Paducah

From: Bret O. Watkins, P.G. (HDR)

Subject: Technical Memorandum
Phase II Preliminary Environmental Site Investigation
City Block Parcel – Paducah Kentucky

1.0 Introduction

HDR was retained by the City of Paducah (City) to conduct a Phase II Preliminary Environmental Site Investigation (PSI) of the City Block Parcel located at the corner of Broadway and 2nd Street. This project was executed under signed Agreement between the City and HDR dated October 22nd, 2019 and was conducted in conjunction with a site geotechnical investigation. The intent of this assessment is to analyze the existing soil and groundwater conditions from an environmental perspective. More specifically, this assessment is intended to identify the presence or absence of environmental impacts associated with historical site activities.

2.0 Project Description and Background

A Phase I Environmental Site Assessment (ESA) was conducted at the site by HDR (report titled "Phase I Environmental Site Assessment of 2nd Street City Block Parking Lot", dated July 24th, 2019. The ESA found that the Subject Property has been actively developed since the early 1800s with several former commercial and light industrial facilities up until the early 1980s, when the city block was razed and later developed as the current parking lot. From the historic review of the site and surrounding properties, several former businesses were identified at the site that could pose an environmental concern for future development. In response to the presence of these former businesses, and with a preponderance of caution for project redevelopment, a Phase II PSI was recommended.

3.0 Field Activities

The field portion of this PSI was performed in October – November 2019 in conjunction with a geotechnical drilling exploration program in support of future site development. Four (4) geotechnical test borings were chosen for environmental sampling activities, which were advanced by hollow-stem augers. These four (4) boring locations were chosen to accommodate both environmental and geotechnical purpose; Table 3-1 provides a summary of the environmental test boring data. The Environmental Boring Location Plan (attached) depicts locations of both geotechnical and environmental test borings.

Table 3-1. Environmental Test Boring Data

Boring No.	Latitude	Longitude	Total Depth (ft)	Groundwater Readings (ft)
B-4	37.089039	-88.594836	40	8.6(*)
B-5	37.088762	-88.595706	40	20.9
B-11	37.088125	-88.595067	40.5	--
B-14	37.088421	-88.59450	40.5	26.9

(*) – Borehole caved in prior to collection of static groundwater reading.

Soil samples were collected from discrete and composite depths by split-spoon barrel sampler. Soil sampling equipment was decontaminated with a biodegradable phosphate-free detergent prior to and between collections of samples chosen for environmental testing. Field screening of soil samples collected from all borings was performed with a photo-ionization detector (PID) as an added measure to identify any potential volatile organic compounds (VOCs). Upon completion of each environmental test boring, groundwater grab samples were collected by disposable bailer. Table 3-2 provides a summary of soil and groundwater sampling data. Boring logs are attached for reference.

Table 3-2. Sample Collection Analysis Summary

Boring No.	Sample No.	Depth (ft.)	Date & Time Collected		Media	Analyses
B-4	CBPSB04010406	4-6	10/28/19	1345	Soil	VOCs, SVOCs, TAL Metals
	CBPSB04012830	28-30	10/28/19	1448	Soil	VOCs, SVOCs
B-5	CBPSB05010608	6-8	10/29/19	1505	Soil	VOCs, SVOCs, TAL Metals
	CBPSB05012225	22-25	10/29/19	1550	Soil	VOCs, SVOCs
	CBPSB05GW	--	10/30/19	0730	GW	VOCs, SVOCs, TAL Metals (filtered/unfiltered)
B-11	CBPSB11010206*	2-6	11/13/19	0830	Soil	VOCs, SVOCs, TAL Metals, PCBs
	CBPSB11012426	24-26	11/13/19	0920	Soil	VOCs, SVOCs
	CBPSB1101GW*	--	11/13/19	1130	GW	VOCs, SVOCs, TAL Metals (filtered/unfiltered), PCBs
B-14	CBPSB14010206	2-6	11/13/19	1230	Soil	VOCs, SVOCs, TAL Metals
	CBPSB14012830	28-30	11/13/19	1345	Soil	VOCs, SVOCs
	CBPSB1401GW	--	11/14/19	0730	GW	VOCs, SVOCs, TAL Metals (filtered/unfiltered)

(*) – collected field duplicate
GW - groundwater

4.0 Analytical Results

Soil and groundwater samples were analyzed for volatile (EPA Method 8260) and semi-volatile organic compounds(EPA Method 8270) (VOCs/SVOCs), Target Analyte List (TAL) Metals (EPA Method 6010, and poly-chlorinated biphenyls (EPA Method 8082) (PCBs). Both filtered and unfiltered groundwater samples were collected via 0.45-micron filter as a comparison between suspended and dissolved metals. Analytical results were compared to the U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) table and the Kentucky Guidance for Ambient Background Assessment.

The USEPA RSLs were developed by the EPA to be used for site screening and initial cleanup goals, as applicable. The screening levels are not de facto cleanup standards but rather a tool

used to help identify areas, contaminants, and conditions that require further attention at a particular site.

The Kentucky Guidance for Ambient Background Assessment is a guidance document prepared by the Kentucky Energy and Environment Cabinet to provide a simplified statistical procedure for determining if site specific data is comparable to ambient background levels. This refers to concentrations of naturally occurring inorganic substances in the environment that are representative of the region surrounding the site, and not attributable to an identifiable release. The generic ambient background values are applicable to all sites in Kentucky, and are useful for identifying constituents requiring remedial action such as removal or engineering controls.

The following table presents a summary of soil sample analytical detections as compared to USEPA RSLs for resident and industrial soil. Exceedances of the resident soil (more conservative) screening level are in **bold**, with exceedances of industrial soil screening levels highlighted in yellow:

Table 4-1. Soil Sample Detection Summary

Constituent	USEPA RSL (Nov. 2019)		Boring Location Analytical Result				
	Resident Soil	Industrial Soil	B-4 (4'-6')	B-5 (6'-8')	B-11 (2'-6')*	B-14 (2'-6')	B-14 (28'-30')
Acetone	6.1E+04	6.7E+05	--	--	0.031	--	0.018
Fluoranthene	2.4E+03	3.0E+04	0.40	--	--	--	--
Isophorone	5.7E+02	2.4E+03	--	--	--	6.11	--
2-Methylnaphthalene	2.4E+02	3.0E+03	0.62	--	--	--	--
Phenanthrene	1.8E+03	2.3E+04	1.08	--	--	--	--
Pyrene	1.8E+03	2.3E+04	0.33	--	--	--	--
Aluminum	7.7E+04	1.1E+06	9,270	8,200	1.4E+04	1.2E+04	Not Analyzed (NA)
Arsenic	0.68	3.0	**5.92**	**2.88**	**5.48**	**8.65**	NA
Barium	1.5E+04	2.2E+05	76.0	64.9	860	42.6	NA
Beryllium	1.6E+02	2.3E+03	0.566	1.12	1.39	1.38	NA
Calcium	--	--	6,740	2,420	1,440	1,430	NA
Cadmium	71	980	0.344	--	0.438	0.652	NA
Cobalt	23	350	3.97	9.52	13.7	15.7	NA
Chromium (III)	1.2E+05	1.8E+06	24.4	8.87	14.8	13.0	NA
Copper	3.1E+03	4.7E+04	67.7	7.03	12.2	13.2	NA
Iron	5.5E+04	8.2E+05	1.9E+04	1.1E+04	3.6E+04	3.0E+04	NA
Potassium	--	--	818	823	614	650	NA
Magnesium	--	--	1,060	1,130	2,200	2,690	NA
Manganese	1.8E+03	2.6E+04	237	339	264	368	NA
Sodium	2.3E+03	3.5E+04	105	182	146	--	NA
Nickel	1.5E+03	2.2E+04	8.13	11.7	19.2	32.5	NA
Lead	400	800	57.8	13.7	14.2	14.9	NA
Vanadium	3.9E+02	5.8E+03	23.0	15.3	20.9	25.4	NA
Zinc	2.3E+04	3.5E+05	46.8	34.7	80.0	88.1	NA
Mercury	11	46	0.31	0.038	0.030	0.018	NA

All results presented in mg/kg.
(*) – collected field duplicate.

The following table presents a summary of groundwater sample analytical detections as compared to USEPA RSLs for Tapwater and Resident Soil to Groundwater. Exceedances of the Tapwater screening levels are in **bold**, with exceedances of Resident Soil to Groundwater highlighted in yellow:

Table 4-2. Groundwater Sample Detection Summary

Constituent	USEPA RSL (Nov. 2019)		Boring Location Analytical Result					
			B-5		B-11*		B-14	
	Tapwater	Resident Soil to Groundwater	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Aluminum	2.0E+04	2.0E+04	**1.2E+05**	--	--	--	**4.8E+04**	--
Arsenic	0.052	9.7	**57.9**	--	--	--	**17.1**	--
Barium	3.8E+03	6.4E+04	581	83.6	76.7	74.2	314	95.1
Beryllium	25.0	64.0	5.9	--	--	--	--	--
Calcium	--	--	1.8E04	6.9E+04	5.6E+04	5.6E+04	5.9E+04	5.3E+04
Cobalt	6.0	3,400	**73.8**	--	--	--	**20.6**	--
Chromium (III)	2.2E+04	8.9E+04	253	--	--	--	53.3	--
Copper	800	1.8E+05	67.3	--	--	--	32.2	--
Iron	1.4E+04	3.2E+06	1.3E+04	--	698	706	**6.1E+04**	--
Potassium	--	--	7,800	3,500	5,230	5,050	7,920	1,960
Magnesium	--	--	1.7E+04	3.6E+04	2.5E+04	2.4E+04	8.1E+04	7.1E+04
Manganese	430	4,400	**1,900**	**2,020**	**944**	**1,020**	**564**	216
Sodium	600	1.4E+05	4,490	4.3E+04	5.6E+04	5.5E+04	5.6E+04	5.7E+04
Nickel	390	1.8E+04	88.5	--	--	--	42.6	--
Lead	15.0	15.0	**82.9**	--	--	--	**15.9**	--
Vanadium	86	600	**325**	--	--	--	**89.5**	--
Zinc	6,000	2.3E+06	285	--	37.7	45.0	131	58.9
Mercury	0.63	0.63	**72.7**	--	--	--	--	--
Acetone	1.4E+04	4.4E+06	13.8		21.4		--	
Ethylbenzene	1.5	2,100	--		--		**62.8**	
Tetrachloroethene	11.0	65.0	--		**12.6**		--	
Toluene	1,100	5,300	--		--		98.6	
o-Xylene	190	8,000	--		--		12.7	
m,p-Xylene	190	7,100	--		--		94.5	
Xylenes (total)	190	7,500	--		--		107	
Isopropylbenzene	450	1,900	--		--		16.8	
Benzene	0.46	9.8	--		--		**440**	
Cyclohexane	1.3E+04	--	--		--		122	

All results presented in ug/L.
(*) – collected field duplicate.

Multiple unfiltered metals constituents exceeded both Tapwater and Resident Soil to Groundwater RSLs, with exceedances of Manganese concentrations above Tapwater RSLs in filtered samples. No filtered metals samples were identified above the Resident Soil to Groundwater RSLs. Ethylbenzene and Tetrachloroethene were identified in samples collected from borings B-11 and B-14, respectively, as exceeding Tapwater RSLs; however levels were below Resident Soil to Groundwater thresholds. Benzene was the only organic contaminant found to be in exceedance of both Tapwater and Resident Soil to Groundwater RSLs.

5.0 Conclusions & Recommendations

The intent of this PSI is to confirm or deny the presence or absence of environmental contaminants present within subsurface media at the site, not to fully define the nature and extent

of contamination. Our approach to implementing this PSI was to perform environmental due diligence in concert with the geotechnical engineering investigation. Thus, sample locations were chosen to provide the greatest coverage area within the relative parameters of the geotechnical boring plan.

Based on analytical results obtained during this PSI, contaminants of concern have been identified at concentrations above applicable USEPA preliminary screening levels – notably Arsenic in soil, and Ethylbenzene, Tetrachloroethene, and Benzene in groundwater.

Regarding Arsenic, the Kentucky Ambient Background median concentration for naturally occurring arsenic is 8.9 mg/kg, thus the concentrations of Arsenic encountered at the site appear to fall below the state median concentration level. Based on this information, Arsenic soil concentrations do not appear to pose an environmental concern to the site.

Regarding Ethylbenzene and Tetrachloroethene, concentrations were found below the Resident Soil to Groundwater exposure pathway, which based on the anticipated site development, would be the most applicable. Tapwater exposure risk appears to be minimal, as no documentation has been identified or presented that suggests shallow groundwater within the vicinity of the site is used for potable purposes. The Tapwater RSLs are presented for comparison to the most stringent of standards. Based on this information, concentrations of Ethylbenzene and Tetrachloroethene do not appear to pose an environmental concern to the site.

Regarding Benzene, concentrations were found above the RSL for Resident Soil to Groundwater – Dermal, which based on the anticipated site development, would likely be the most applicable of RSLs for preliminary comparison. Benzene can be a concern for future site workers and occupants. Provided the concentrations and location of these impacts relative to future development exposure can be remedied through the use of engineering and institutional controls implemented with design and development of the property for its intended purpose.

6.0 Limitations

The findings and conclusions presented in this report are based on Standard of Practice policy and guidelines, informal discussions with various agencies, a review of the available literature cited in this report, conditions noted at the time of this PSI, and HDR's interpretation of the information obtained as part of this PSI. The findings and conclusions are limited to the specific project and properties described in this report, and by the accuracy and completeness of the information provided by others. A PSI cannot entirely eliminate uncertainty regarding the potential for environmental contamination. Conducting this assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the Site within reasonable limits of time and cost. In conducting its services, HDR used a degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality.

7.0 References

Kentucky Natural Resources and Environmental Protection Cabinet. "Kentucky Guidance for Ambient Background Assessment." Dated January 8, 2004.

Phase I Environmental Site Assessment, "2nd Street City Block Parking Lot – Paducah, KY". HDR Engineering, Inc. HDR Project No. 10172362. Dated July 24, 2019.

United States Environmental Protection Agency. “Regional Screening Levels for Chemical Contaminants at Superfund Sites.” (Accessed December 10, 2019). <URL: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables >

Attachments

Environmental Boring Location Plan
Environmental Soil Test Boring Logs
Laboratory Analytical Results – Eurofins / Test America

LEGEND

BORING SAMPLE LOCATION

ENVIRONMENTAL BORING SAMPLE LOCATION

DATA SOURCE: ESRI

0 Feet 100

BING MAPS HYBRID

B-1
B-2
B-5
B-6
B-7
B-3
B-4
B-8
B-10
B-12
B-13
B-14
B-9
B-11
B-15

Jefferson St
N 2nd St
N Water St
N 3rd St
Broadway St
3238
BR 45
BL 24
Market House Sq
S 2nd St
S Water St
Ohio

CITY OF PADUCAH BLOCK DEVELOPMENT

KENTUCKY - MCCRACKEN COUNTY

BORING LOCATION PLAN

SUBSURFACE INVESTIGATION

PATH: G:_EBS_HDR PROJECTS\10197216 - PADUCAH CITY BLOCK DEVELOPMENT\ARCGIS\PADUCAH CITY BLOCK DEVELOPMENT - ENVIRONMENTAL BORING LOCATION PLAN.MXD - USER: TLYNN - DATE: 12/2/2019

SUBSURFACE INVESTIGATION
BORING LOG

Sheet No. 1 of 1

State **Kentucky** Latitude **37.08904 0** Longitude **-88.59484 0**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **334.3 ft**

Job No. **10197216** Dated Started **10/28/2019** Completed **10/28/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **N/A**

Hole Number **B-4** Total Depth **40 ft.** Depth to Water **8.6 ft.** Date Measured **10/29/2019**

Lithology Depth	Lithology Symbol	Description	Overburden / Rock Core	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
0		*Ground Line*	Elev. = 334.3 ft					
		CONCRETE	0.4					
		Medium stiff, brown, lean **CLAY** with sand		SS-1	1.5 3.0	1.0	1-2-4	SPT
5				SS-2	4.0 6.0	0.4	1-3-3	SPT
		Soft to medium stiff, black and brown, lean **CLAY** with sand		SS-3	6.5 8.0	0.2	1-3-2	SPT
10				SS-4	8.5 10.0	0.5	1-2-1	SPT
			12.3					
		Very stiff to hard, brown, silty **CLAY** with sand		SS-5	14.0 15.5	1.5	3-8-11	SPT
15								
20				SS-6	19.0 20.5	1.3	4-10-18	SPT
25				SS-7	24.0 25.5	1.4	7-15-20	SPT
			27.3					
		Dense to very dense, brown, poorly graded **GRAVEL** with sand		SS-8	29.0 30.5	1.5	2-9-21	SPT
30								
35				SS-9	33.5 35.0	0.8	15-29-40	SPT
				SS-10	38.5 40.0	0.5	15-22-14	SPT
40			40.0					
		Boring Terminated at 40.0 ft. (Elev. 294.3)						
45		***NOTES*** No PID readings identified						
50		Collected sample No. CBPSB04010406 at 1345 on 10/28/2019 from 4.0'-6.0'.						
		Collected sample No. CBPSB04012830 at 1448 on 10/28/2019 from 28.0'-30.0'.						
55								
60								

SUBSURFACE INVESTIGATION
BORING LOG

State **Kentucky** Latitude **37.08876 0** Longitude **-88.59571 0**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **336.4 ft**

Job No. **10197216** Dated Started **10/29/2019** Completed **11/4/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **N/A**

Hole Number **B-5** Total Depth **39.9 ft.** Depth to Water **20.9 ft.** Date Measured **11/4/2019**

Lithology Depth	Lithology Symbol	Description	Overburden / Rock Core	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
0		*Ground Line*	Elev. = 336.4 ft					
		CONCRETE	0.6					
		Stiff, brown, lean **CLAY** with sand		SS-1	1.5 3.0	0.0	8-9-5	SPT
5				SS-2	4.0 5.5	0.1	12-8-4	SPT
			6.0					
		Soft to very stiff, brown, silty **CLAY** with sand		SS-3	6.5 8.0	1.2	1-1-2	SPT
10				SS-4	9.0 10.5	1.5	2-4-6	SPT
15				SS-5	14.0 15.5	1.5	3-3-4	SPT
20				SS-6	19.0 20.5	1.5	4-7-9	SPT
25				SS-7	24.0 25.5	0.9	7-5-4	SPT
			27.3					
		Medium dense to very dense, brown and dark brown, poorly graded **GRAVEL** with sand		SS-8	29.0 30.5	1.1	4-13-15	SPT
35				SS-9	33.5 35.0	1.5	25-36-41	SPT
40			39.9	SS-10	38.5 39.9	1.1	19-32-50/0.4	SPT
		Boring Terminated at 39.9 ft. (Elev. 296.5)						
45		***NOTES*** Split spoon at 1.5' resulted in no recovery						
50		No PID readings identified						
		Metals composite 1.5'-7.0'						
55		Collected sample No. CBPSB05010608 at 1505 on 10/29/2019 from 6.0'-8.0'.						
60		Collected sample No. CBPSB05012225 at 1029 on 10/29/2019						

SUBSURFACE INVESTIGATION
BORING LOG

State **Kentucky** Latitude **37.08876 0** Longitude **-88.59571 0**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **336.4 ft**

Job No. **10197216** Dated Started **10/29/2019** Completed **11/4/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **N/A**

Hole Number **B-5** Total Depth **39.9 ft.** Depth to Water **20.9 ft.** Date Measured **11/4/2019**

Lithology		Description	Overburden / Rock Core	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
Depth	Symbol							
60		*Continued from previous page* Elev. = 276.4 ft						
		from 22.0'-25.0'.						
65		Collected sample No. CBPSB0501GW at 0730 on 10/30/2019.						
70								
75								
80								
85								
90								
95								
100								
105								
110								
115								
120								

SUBSURFACE INVESTIGATION
BORING LOG

State **Kentucky** Latitude **37.08813 [0]** Longitude **-88.59507 [0]**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **336.7 ft**

Job No. **10197216** Dated Started **11/13/2019** Completed **11/13/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **22 ft.**

Hole Number **B-11** Total Depth **40.5 ft.** Depth to Water **N/A** Date Measured

Lithology Depth	Lithology Symbol	Description (Overburden / Rock Core)	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
0		*Ground Line* Elev. = 336.7 ft					
		CONCRETE 1.5'	SS-1	1.5 / 1.8	0.0	50/0.3--	SPT
		Stiff to hard, brown and gray, sandy fat **CLAY**	SS-2	2.8	1.3	3-6-8	SPT
5			SS-3	4.3 / 5.8	1.4	2-6-7	SPT
		6.2' Medium stiff to stiff, brown, lean **CLAY** with sand	SS-4	6.5 / 8.0	1.4	1-3-4	SPT
10			SS-5	9.0 / 10.5	1.5	1-3-5	SPT
15			SS-6	14.0 / 15.5	1.5	2-3-5	SPT
20			SS-7	19.0 / 20.5	1.4	4-4-11	SPT
		22.3' Dense to very dense, brown, poorly graded **SAND** with clay and gravel (and/or silty clay and gravel)	SS-8	24.0 / 25.5	1.2	5-20-21	SPT
25							
30			SS-9	29.0 / 30.5	1.4	21-40-35	SPT
		32.3' Dense to very dense, brown, well-graded **SAND** with clay and gravel (and/or silty clay and gravel)	SS-10	34.0 / 35.5	1.5	26-38-30	SPT
35							
40		40.5' Boring Terminate at 40.5 ft. (Elev. 296.2)	SS-11	39.0 / 40.5	1.5	8-18-20	SPT
45		***NOTES*** Boring offset from original location					
		Water well located 60 ft. West of B-11					
50		Currently patched with asphalt pavement, notes settlement issues					
55		Collected sample No. CBPSB11010206 at 0830 on 11/13/2019 from 2.0'-6.0'.					
		Collected sample No. CBPSB11020206 at 0830 on 11/13/2019					
60							

SUBSURFACE INVESTIGATION
BORING LOG

State **Kentucky** Latitude **37.08813 0** Longitude **-88.59507 0**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **336.7 ft**

Job No. **10197216** Dated Started **11/13/2019** Completed **11/13/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **22 ft.**

Hole Number **B-11** Total Depth **40.5 ft.** Depth to Water **N/A** Date Measured

Lithology		Description	Overburden / Rock Core	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
Depth	Symbol							
60		*Continued from previous page* Elev. = 276.7 ft						
		from 2.0'-6.0'.						
65		Collected sample No. CBPSB11012426 at 0920 on 11/13/2019 from 24.0'-26.0'.						
70		Collected sample No. CBPSB1101GW, VOG, SVOG, F/U Metals at 1130 on 11/13/2019.						
75		Collected sample No. CBPSB1102GW, VOG, SVOG at 1130 on 11/13/2019.						
80								
85								
90								
95								
100								
105								
110								
115								
120								

SUBSURFACE INVESTIGATION
BORING LOG

Sheet No. 1 of 1

State **Kentucky** Latitude **37.08842 0** Longitude **-88.59450 0**

County **McCracken** Location

Project Name **Paducah City Block Development** Surface Elevation **336.7 ft**

Job No. **10197216** Dated Started **11/13/2019** Completed **11/13/2019**

Driller **N. Gonzales** Logged by **J. Hilt** Depth to Water: Immediate **N/A**

Hole Number **B-14** Total Depth **40.5 ft.** Depth to Water **26.9 ft.** Date Measured **11/14/2019**

Lithology Depth	Lithology Symbol	Description	Overburden / Rock Core	Sample No. / Core No.	Depth / Run	Rec. (ft.) / Rec (ft.)	Blows / Rec. (%)	Type / RQD (%)
0		*Ground Line*	Elev. = 336.7 ft					
		CONCRETE	1.5'					
		Very stiff, brown and gray, sandy fat **CLAY**		SS-1	1.5 – 3.0	1.2	2-8-10	SPT
5				SS-2	4.0 – 5.5	1.2	3-8-11	SPT
			6.0					
		Stiff to very stiff, brown and gray, lean **CLAY** with sand		SS-3	6.5 – 8.0	1.4	2-5-8	SPT
10				SS-4	9.0 – 10.5	1.3	1-5-7	SPT
15				SS-5	14.0 – 15.5	1.5	2-6-6	SPT
20				SS-6	19.0 – 20.5	1.4	2-7-11	SPT
25				SS-7	24.0 – 25.5	1.5	5-8-11	SPT
30				SS-8	29.0 – 30.5	1.3	13-40-46	SPT
			32.3					
35		Very dense, brown, well-graded **SAND** with clay and gravel (and/or silty clay and gravel)		SS-9	34.0 – 35.4	1.4	43-49-50/0.4	SPT
40			40.5	SS-10	39.0 – 40.5	1.2	46-45-40	SPT
		Boring Terminate at 40.5 ft. (Elev. 296.2)						
45		***NOTES*** Boring offset from original location						
50		Collected sample No. CBPSB14010206 at 1230 on 11/13/2019 from 2.0'-6.0'.						
		Collected sample No. CBPSB14012830 at 1345 on 11/13/2019 from 28.0'-30.0'.						
55		Collected sample No. CBPSB1401GW at 0730 on 11/14/2019.						
60								

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-195078-1
Laboratory SDG: Paduckah Downtown Development Project
Client Project/Site: City BLock Parcel - Paducah KY

For:
HDR Inc
4645 Village Square Dr
Suite F
Paducah, Kentucky 42001

Attn: Bret Watkins

Authorized for release by:
11/30/2019 4:37:54 PM

Ken Hayes, Project Manager II
(615)301-5035
ken.hayes@testamericainc.com

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Job ID: 600-195078-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-195078-1

Comments
No additional comments.

Receipt
The samples were received on 11/1/2019 10:18 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 600-279826 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone. 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 600-279826/2).

Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 600-279826 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene.

Method 8260B: Surrogate (4-Bromofluorobenzene) recovery for the following sample was outside the upper control limit: CBPSB04010406 (600-195078-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260B: The following sample was diluted due to the nature of the sample matrix: CBPSB04010406 (600-195078-1). Elevated reporting limits (RLs) are provided. Sample IS responses were low in the straight run (5g).

Method 8260B: Surrogate recovery for the following sample was outside the upper control limit: CBPSB05012225 (600-195078-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

GC/MS Semi VOA
Method 8270C: The matrix spike (MS) recoveries for preparation batch 600-279309 and 600-279425 and analytical batch 600-279485 were outside control limits. Sample matrix interference is suspected.

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-279485 recovered above the upper control limit for 2-Methylnaphthalene, Nitrobenzene and Di-n-octyl phthalate. 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 600-279485/2).

Method 8270C: The reference method specifies a +/- 0.5 second retention time difference between the midpoint in the initial calibration (ICAL) and the continuing calibration verification (CCV). The CCV associated with the following sample run on instrument CHSVMS09 exceeded these criteria: (CCVIS 600-279485/2). This retention time shift is due to normal and reasonable column maintenance and does not affect the instrument chromatography resolution, sensitivity, or identification of target analytes. System retention times have been updated for proper analyte identification.

Method 8270C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 600-279425 and analytical batch 600-279568 recovered outside control limits for the following analytes: multiple compounds. These analytes were biased high in the LCS and LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 600-279425 and analytical batch 600-279568 recovered outside control limits for the following analytes: multiple compounds.

Method 8270C: Internal standard responses were outside of acceptance limits for the following samples: CBPSB04010406 (600-195078-1), CBPSB04012830 (600-195078-2), CBPSB05010608 (600-195078-3) and CBPSB05012225 (600-195078-4). The samples showed evidence of matrix interference. The associated analytes were non detected; therefore, the data have been reported.

Job ID: 600-195078-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-279590 recovered above the upper control limit for Hexachlorocyclopentadiene and Pentachlorophenol. 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 600-279590/2).

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-279590 recovered above the upper control limit for 3,3'-Dichlorobenzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 600-279590/3).

Method 8270C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 600-279425 and analytical batch 600-279568 recovered outside control limits for several analytes.

Method 8270C: The laboratory control sample (LCS) for preparation batch 600-279502 and analytical batch 600-279686 recovered outside control limits for the following analytes: 2,4-Dichlorophenol, Hexachlorobenzene and Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 600-279502 and 600-279502 and analytical batch 600-279686 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-279686 recovered above the upper control limit for 2,4-Dichlorophenol, Hexachlorobutadiene, Hexachlorobenzene and N-Nitrosodiphenylamine. 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 600-279686/2).

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

Metals

Method 6010B: The ICSAB for batch 600-280499 was outside the acceptance limits for element: Silver. The samples associated with this ICSAB were non-detects for the affected analytes; therefore, the data have been reported.

Method 6010B: The continuing calibration verification (CCV) associated with batch 600-280499 recovered above the upper control limit for Silver. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: CBPSB0501GW (600-195078-5) and (CCV 600-280499/142).

Method 6010B: The serial dilution performed for the following sample associated with batch 600-280475 was outside control limits for Barium (53%): (600-195453-B-4-A SD ^5)

Method 6010B: The ICSAB for batch 600-280475 was outside the acceptance limits for element: Silver. The associated samples are non-detect for this analyte; therefore, data have been reported.

Method 6010B: The continuing calibration verification (CCV) associated with batch 600-280475 recovered above the upper control limit for Thallium. The method blank associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: (CCV 600-280475/34), (CCV 600-280475/47) and (MB 600-280267/1-A).

Method 6010B: The low level continuing calibration verification (CCVL) associated with batch 600-281654 recovered above the upper control limit for thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

Industrial Hygiene

Job ID: 600-195078-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

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

Organic Prep
Method 3510C: 195078-5 has 20% sediments (wet dirt), 195065-6 has 40% sediments (wet dirt), 195065-7 has 10% sediments (wet dirt), 195065-8 has 10% sediments (wet dirt), 195065-9 has 20% sediment (wet dirt) and 195065-10 has 30% sediments (wet dirt).

CBPSB0501GW (600-195078-5)

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

Method Summary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C LVI	Liquid-Liquid Extraction (Separatory Funnel) LVI	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap for Solids	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

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

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-195078-1	CBPSB04010406	Solid	10/28/19 13:45	11/01/19 10:18	
600-195078-2	CBPSB04012830	Solid	10/28/19 14:48	11/01/19 10:18	
600-195078-3	CBPSB05010608	Solid	10/29/19 15:05	11/01/19 10:18	
600-195078-4	CBPSB05012225	Solid	10/29/19 15:50	11/01/19 10:18	
600-195078-5	CBPSB0501GW	Water	10/30/19 07:30	11/01/19 10:18	
600-195078-6	CBPSB0501GW	Water	10/30/19 07:30	11/01/19 10:18	

Client: HDR Inc
Project/Site: City BLock Parcel - Paducah KY

Job ID: 600-195078-1
SDG: Paduckah Downtown Development Project

Client Sample ID: CBPSB04010406
Date Collected: 10/28/19 13:45
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Benzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Bromodichloromethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Bromoform	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Bromomethane	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
2-Butanone (MEK)	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Carbon disulfide	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Carbon tetrachloride	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Chlorobenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Chlorobromomethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Chloroethane	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Chloroform	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Chloromethane	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
cis-1,2-Dichloroethene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
cis-1,3-Dichloropropene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Cyclohexane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Dibromochloromethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2-Dibromo-3-Chloropropane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2-Dibromoethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2-Dichlorobenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,3-Dichlorobenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,4-Dichlorobenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Dichlorodifluoromethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1-Dichloroethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2-Dichloroethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1-Dichloroethene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2-Dichloropropane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Ethylbenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
2-Hexanone	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Isopropylbenzene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Methylene Chloride	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Methyl tert-butyl ether	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
m-Xylene & p-Xylene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
o-Xylene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Styrene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1,2,2-Tetrachloroethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Tetrachloroethene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Toluene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
trans-1,2-Dichloroethene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
trans-1,3-Dichloropropene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,2,4-Trichlorobenzene	ND	*	19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1,1-Trichloroethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1,2-Trichloroethane	ND		153		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Trichloroethene	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Vinyl acetate	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Vinyl chloride	ND		38.2		ug/Kg		11/08/19 11:49	11/08/19 15:16	1
Xylenes, Total	ND		19.1		ug/Kg		11/08/19 11:49	11/08/19 15:16	1

Client Sample ID: CBPSB04010406

Date Collected: 10/28/19 13:45
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-1

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*	*X*	*57 - 140*	*11/08/19 11:49*	*11/08/19 15:16*	*1*
Dibromofluoromethane	*96*		*68 - 140*	*11/08/19 11:49*	*11/08/19 15:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*11/08/19 11:49*	*11/08/19 15:16*	*1*
Toluene-d8 (Surr)	*104*		*50 - 130*	*11/08/19 11:49*	*11/08/19 15:16*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Acenaphthylene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Benzo[a]anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Benzo[b]fluoranthene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Benzo[k]fluoranthene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Benzo[g,h,i]perylene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Benzo[a]pyrene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Bis(2-chloroethoxy)methane	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Bis(2-chloroethyl)ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Bis(2-ethylhexyl) phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Bromophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Butyl benzyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Chloroaniline	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Chloronaphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Chlorophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Carbazole	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Chrysene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Di-n-butyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Dibenz(a,h)anthracene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Dibenzofuran	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
3,3'-Dichlorobenzidine	ND		656		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Diethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Dimethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4-Dinitrotoluene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,6-Dinitrotoluene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Di-n-octyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Fluoranthene	**398**		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Fluorene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Hexachlorobenzene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Hexachlorocyclopentadiene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Hexachloroethane	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Hexachlorobutadiene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Indeno[1,2,3-cd]pyrene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Isophorone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Methylnaphthalene	**624**		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Naphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
3-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Nitrobenzene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
N-Nitrosodiphenylamine	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
N-Nitrosodi-n-propylamine	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1

Client Sample ID: CBPSB04010406

Date Collected: 10/28/19 13:45
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-1

Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**1080**		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Pyrene	**332**		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Chloro-3-methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Chlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
3 & 4 Methylphenol	ND		656		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4-Dichlorophenol	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4-Dimethylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2-Nitrophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
4-Nitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Pentachlorophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Phenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4,5-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
2,4,6-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
bis (2-Chloroisopropyl) ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
1,1'-Biphenyl	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1
Acetophenone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*57*		*10 - 150*	*11/05/19 15:29*	*11/06/19 16:44*	*1*
2-Fluorophenol	*55*		*25 - 132*	*11/05/19 15:29*	*11/06/19 16:44*	*1*
2-Fluorobiphenyl	*69*		*38 - 130*	*11/05/19 15:29*	*11/06/19 16:44*	*1*
2,4,6-Tribromophenol	*69*		*10 - 148*	*11/05/19 15:29*	*11/06/19 16:44*	*1*
Terphenyl-d14	*84*		*53 - 134*	*11/05/19 15:29*	*11/06/19 16:44*	*1*
Phenol-d5 (Surr)	*58*		*27 - 123*	*11/05/19 15:29*	*11/06/19 16:44*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND	^	0.377		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Aluminum	**9270**		23.6		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Arsenic	**5.92**		0.943		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Barium	**76.0**		0.943		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Beryllium	**0.566**		0.236		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Calcium	**6740**		94.3		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Cadmium	**0.344**		0.236		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Cobalt	**3.97**		0.472		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Chromium	**24.4**		0.472		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Copper	**67.7**		0.472		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Iron	**19600**		18.9		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Potassium	**818**		94.3		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Magnesium	**1060**		94.3		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Manganese	**237**		1.42		mg/Kg		11/12/19 21:52	11/19/19 10:43	1
Sodium	**105**		94.3		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Nickel	**8.13**		0.943		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Lead	**57.8**		0.472		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Antimony	ND		2.36		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Selenium	ND		1.89		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Thallium	ND		1.42		mg/Kg		11/12/19 21:52	11/19/19 10:43	1

Client Sample ID: CBPSB04010406

Lab Sample ID: 600-195078-1
Date Collected: 10/28/19 13:45
Matrix: Solid
Date Received: 11/01/19 10:18

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	23.0		0.472		mg/Kg		11/12/19 21:52	11/18/19 16:26	1
Zinc	46.8		1.42		mg/Kg		11/12/19 21:52	11/18/19 16:26	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	306		15.5		ug/Kg		11/20/19 13:00	11/22/19 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.0		1.0		%			11/05/19 08:31	1
Percent Solids	88.0		1.0		%			11/05/19 08:31	1

Client Sample ID: CBPSB04012830

Lab Sample ID: 600-195078-2
Date Collected: 10/28/19 14:48
Matrix: Solid
Date Received: 11/01/19 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Benzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Bromodichloromethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Bromoform	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Bromomethane	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
2-Butanone (MEK)	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Carbon disulfide	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Carbon tetrachloride	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Chlorobenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Chlorobromomethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Chloroethane	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Chloroform	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Chloromethane	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
cis-1,2-Dichloroethene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
cis-1,3-Dichloropropene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Cyclohexane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Dibromochloromethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2-Dibromo-3-Chloropropane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2-Dibromoethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2-Dichlorobenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,3-Dichlorobenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,4-Dichlorobenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Dichlorodifluoromethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1-Dichloroethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2-Dichloroethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1-Dichloroethene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2-Dichloropropane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Ethylbenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
2-Hexanone	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Isopropylbenzene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Methylene Chloride	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1

Client Sample ID: CBPSB04012830

Date Collected: 10/28/19 14:48
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
m-Xylene & p-Xylene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
o-Xylene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Styrene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1,2,2-Tetrachloroethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Tetrachloroethene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Toluene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
trans-1,2-Dichloroethene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
trans-1,3-Dichloropropene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,2,4-Trichlorobenzene	ND	*	5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1,1-Trichloroethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1,2-Trichloroethane	ND		41.8		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Trichloroethene	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Vinyl acetate	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Vinyl chloride	ND		10.4		ug/Kg		11/08/19 13:42	11/08/19 19:41	1
Xylenes, Total	ND		5.22		ug/Kg		11/08/19 13:42	11/08/19 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*57 - 140*	*11/08/19 13:42*	*11/08/19 19:41*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*11/08/19 13:42*	*11/08/19 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*	*11/08/19 13:42*	*11/08/19 19:41*	*1*
Toluene-d8 (Surr)	*106*		*50 - 130*	*11/08/19 13:42*	*11/08/19 19:41*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Acenaphthylene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Anthracene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Benzo[a]anthracene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Benzo[b]fluoranthene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Benzo[k]fluoranthene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Benzo[g,h,i]perylene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Benzo[a]pyrene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Bis(2-chloroethoxy)methane	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Bis(2-chloroethyl)ether	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Bis(2-ethylhexyl) phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Bromophenyl phenyl ether	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Butyl benzyl phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Chloroaniline	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Chloronaphthalene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Chlorophenyl phenyl ether	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Carbazole	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Chrysene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Di-n-butyl phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Dibenz(a,h)anthracene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Dibenzofuran	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
3,3'-Dichlorobenzidine	ND		657		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Diethyl phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Dimethyl phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1

Client Sample ID: CBPSB04012830
Date Collected: 10/28/19 14:48
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-2
Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,6-Dinitrotoluene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Di-n-octyl phthalate	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Fluoranthene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Fluorene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Hexachlorobenzene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Hexachlorocyclopentadiene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Hexachloroethane	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Hexachlorobutadiene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Indeno[1,2,3-cd]pyrene	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Isophorone	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Methylnaphthalene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Naphthalene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
3-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Nitrobenzene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
N-Nitrosodiphenylamine	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
N-Nitrosodi-n-propylamine	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Phenanthrene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Pyrene	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Chloro-3-methylphenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Chlorophenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Methylphenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
3 & 4 Methylphenol	ND		657		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,4-Dichlorophenol	ND	*	329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,4-Dimethylphenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2-Nitrophenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
4-Nitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Pentachlorophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Phenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,4,5-Trichlorophenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
2,4,6-Trichlorophenol	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
bis (2-Chloroisopropyl) ether	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
1,1'-Biphenyl	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1
Acetophenone	ND		329		ug/Kg		11/05/19 15:29	11/06/19 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*10 - 150*	*11/05/19 15:29*	*11/06/19 17:11*	*1*
2-Fluorophenol	*85*		*25 - 132*	*11/05/19 15:29*	*11/06/19 17:11*	*1*
2-Fluorobiphenyl	*96*		*38 - 130*	*11/05/19 15:29*	*11/06/19 17:11*	*1*
2,4,6-Tribromophenol	*109*		*10 - 148*	*11/05/19 15:29*	*11/06/19 17:11*	*1*
Terphenyl-d14	*127*		*53 - 134*	*11/05/19 15:29*	*11/06/19 17:11*	*1*
Phenol-d5 (Surr)	*85*		*27 - 123*	*11/05/19 15:29*	*11/06/19 17:11*	*1*

Client Sample ID: CBPSB05010608

Date Collected: 10/29/19 15:05
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Benzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Bromodichloromethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Bromoform	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Bromomethane	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
2-Butanone (MEK)	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Carbon disulfide	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Carbon tetrachloride	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Chlorobenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Chlorobromomethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Chloroethane	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Chloroform	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Chloromethane	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
cis-1,2-Dichloroethene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
cis-1,3-Dichloropropene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Cyclohexane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Dibromochloromethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2-Dibromo-3-Chloropropane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2-Dibromoethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2-Dichlorobenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,3-Dichlorobenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,4-Dichlorobenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Dichlorodifluoromethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1-Dichloroethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2-Dichloroethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1-Dichloroethene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2-Dichloropropane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Ethylbenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
2-Hexanone	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Isopropylbenzene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Methylene Chloride	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
4-Methyl-2-pentanone (MIBK)	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Methyl tert-butyl ether	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
m-Xylene & p-Xylene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
o-Xylene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Styrene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1,2,2-Tetrachloroethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Tetrachloroethene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Toluene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
trans-1,2-Dichloroethene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
trans-1,3-Dichloropropene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,2,4-Trichlorobenzene	ND	*	5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1,1-Trichloroethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1,2-Trichloroethane	ND		41.2		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Trichloroethene	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Vinyl acetate	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Vinyl chloride	ND		10.3		ug/Kg		11/08/19 13:42	11/08/19 20:03	1
Xylenes, Total	ND		5.15		ug/Kg		11/08/19 13:42	11/08/19 20:03	1

Client Sample ID: CBPSB05010608

Date Collected: 10/29/19 15:05
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-3

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*57 - 140*	*11/08/19 13:42*	*11/08/19 20:03*	*1*
Dibromofluoromethane	*100*		*68 - 140*	*11/08/19 13:42*	*11/08/19 20:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*	*11/08/19 13:42*	*11/08/19 20:03*	*1*
Toluene-d8 (Surr)	*107*		*50 - 130*	*11/08/19 13:42*	*11/08/19 20:03*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Acenaphthylene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Benzo[a]anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Benzo[b]fluoranthene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Benzo[k]fluoranthene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Benzo[g,h,i]perylene	ND	* F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Benzo[a]pyrene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Bis(2-chloroethoxy)methane	ND	F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Bis(2-chloroethyl)ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Bis(2-ethylhexyl) phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Bromophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Butyl benzyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Chloroaniline	ND	F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Chloronaphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Chlorophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Carbazole	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Chrysene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Di-n-butyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Dibenz(a,h)anthracene	ND	* F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Dibenzofuran	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
3,3'-Dichlorobenzidine	ND	F1	656		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Diethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Dimethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4-Dinitrotoluene	ND	F1 F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,6-Dinitrotoluene	ND	F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Di-n-octyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Fluoranthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Fluorene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Hexachlorobenzene	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Hexachlorocyclopentadiene	ND	F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Hexachloroethane	ND	F1 F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Hexachlorobutadiene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Indeno[1,2,3-cd]pyrene	ND	* F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Isophorone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Methylnaphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Naphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
3-Nitroaniline	ND	F1	1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Nitroaniline	ND	F1	1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Nitrobenzene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
N-Nitrosodiphenylamine	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
N-Nitrosodi-n-propylamine	ND	F1	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1

Client Sample ID: CBPSB05010608

Date Collected: 10/29/19 15:05
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-3

Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Pyrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Chloro-3-methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Chlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
3 & 4 Methylphenol	ND		656		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4-Dichlorophenol	ND	*	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4-Dimethylphenol	ND	F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4,6-Dinitro-2-methylphenol	ND	F1 F2	1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4-Dinitrophenol	ND	F1	1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2-Nitrophenol	ND	F1 F2	328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
4-Nitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Pentachlorophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Phenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4,5-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
2,4,6-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
bis (2-Chloroisopropyl) ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
1,1'-Biphenyl	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1
Acetophenone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*10 - 150*	*11/05/19 15:29*	*11/06/19 17:34*	*1*
2-Fluorophenol	*71*		*25 - 132*	*11/05/19 15:29*	*11/06/19 17:34*	*1*
2-Fluorobiphenyl	*87*		*38 - 130*	*11/05/19 15:29*	*11/06/19 17:34*	*1*
2,4,6-Tribromophenol	*94*		*10 - 148*	*11/05/19 15:29*	*11/06/19 17:34*	*1*
Terphenyl-d14	*91*		*53 - 134*	*11/05/19 15:29*	*11/06/19 17:34*	*1*
Phenol-d5 (Surr)	*76*		*27 - 123*	*11/05/19 15:29*	*11/06/19 17:34*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.388		mg/Kg		11/12/19 21:52	11/19/19 10:45	1
Aluminum	**8200**		24.3		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Arsenic	**2.88**		0.971		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Barium	**64.9**		0.971		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Beryllium	**1.12**		0.243		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Calcium	**2420**		97.1		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Cadmium	ND		0.243		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Cobalt	**9.52**		0.485		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Chromium	**8.87**		0.485		mg/Kg		11/12/19 21:52	11/19/19 10:45	1
Copper	**7.03**		0.485		mg/Kg		11/12/19 21:52	11/19/19 10:45	1
Iron	**10900**		19.4		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Potassium	**823**		97.1		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Magnesium	**1130**		97.1		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Manganese	**339**		1.46		mg/Kg		11/12/19 21:52	11/19/19 10:45	1
Sodium	**182**		97.1		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Nickel	**11.7**		0.971		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Lead	**13.7**		0.485		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Antimony	ND		2.43		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Selenium	ND		1.94		mg/Kg		11/12/19 21:52	11/18/19 16:38	1
Thallium	ND		1.46		mg/Kg		11/12/19 21:52	11/19/19 10:45	1

Client Sample ID: CBPSB05010608

Lab Sample ID: 600-195078-3
Date Collected: 10/29/19 15:05
Matrix: Solid
Date Received: 11/01/19 10:18

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	15.3		0.485		mg/Kg		11/12/19 21:52	11/19/19 10:45	1
Zinc	34.7		1.46		mg/Kg		11/12/19 21:52	11/18/19 16:38	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	38.5		14.4		ug/Kg		11/20/19 13:00	11/22/19 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.4		1.0		%			11/05/19 08:31	1
Percent Solids	76.6		1.0		%			11/05/19 08:31	1

Client Sample ID: CBPSB05012225

Lab Sample ID: 600-195078-4
Date Collected: 10/29/19 15:50
Matrix: Solid
Date Received: 11/01/19 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Benzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Bromodichloromethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Bromoform	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Bromomethane	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
2-Butanone (MEK)	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Carbon disulfide	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Carbon tetrachloride	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Chlorobenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Chlorobromomethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Chloroethane	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Chloroform	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Chloromethane	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
cis-1,2-Dichloroethene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
cis-1,3-Dichloropropene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Cyclohexane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Dibromochloromethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2-Dibromo-3-Chloropropane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2-Dibromoethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2-Dichlorobenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,3-Dichlorobenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,4-Dichlorobenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Dichlorodifluoromethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1-Dichloroethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2-Dichloroethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1-Dichloroethene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2-Dichloropropane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Ethylbenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
2-Hexanone	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Isopropylbenzene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Methylene Chloride	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1

Client Sample ID: CBPSB05012225

Date Collected: 10/29/19 15:50
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
m-Xylene & p-Xylene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
o-Xylene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Styrene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1,2,2-Tetrachloroethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Tetrachloroethene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Toluene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
trans-1,2-Dichloroethene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
trans-1,3-Dichloropropene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,2,4-Trichlorobenzene	ND	*	4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1,1-Trichloroethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1,2-Trichloroethane	ND		37.3		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Trichloroethene	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Vinyl acetate	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Vinyl chloride	ND		9.33		ug/Kg		11/08/19 13:42	11/08/19 16:00	1
Xylenes, Total	ND		4.66		ug/Kg		11/08/19 13:42	11/08/19 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*147*	*X*	*57 - 140*	*11/08/19 13:42*	*11/08/19 16:00*	*1*
Dibromofluoromethane	*101*		*68 - 140*	*11/08/19 13:42*	*11/08/19 16:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*11/08/19 13:42*	*11/08/19 16:00*	*1*
Toluene-d8 (Surr)	*102*		*50 - 130*	*11/08/19 13:42*	*11/08/19 16:00*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Acenaphthylene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Anthracene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Benzo[a]anthracene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Benzo[b]fluoranthene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Benzo[k]fluoranthene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Benzo[g,h,i]perylene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Benzo[a]pyrene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Bis(2-chloroethyl)ether	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Bis(2-ethylhexyl) phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Butyl benzyl phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Chloroaniline	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Chloronaphthalene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Carbazole	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Chrysene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Di-n-butyl phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Dibenz(a,h)anthracene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Dibenzofuran	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
3,3'-Dichlorobenzidine	ND		659		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Diethyl phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Dimethyl phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1

Client: HDR Inc
Project/Site: City BLock Parcel - Paducah KY

Job ID: 600-195078-1
SDG: Paducah Downtown Development Project

Client Sample ID: CBPSB05012225
Date Collected: 10/29/19 15:50
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-4
Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,6-Dinitrotoluene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Di-n-octyl phthalate	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Fluoranthene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Fluorene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Hexachlorobenzene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Hexachloroethane	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Hexachlorobutadiene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Indeno[1,2,3-cd]pyrene	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Isophorone	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Methylnaphthalene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Naphthalene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Nitroaniline	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
3-Nitroaniline	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Nitroaniline	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Nitrobenzene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
N-Nitrosodi-n-propylamine	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Phenanthrene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Pyrene	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Chlorophenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Methylphenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
3 & 4 Methylphenol	ND		659		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,4-Dichlorophenol	ND	*	330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,4-Dimethylphenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4,6-Dinitro-2-methylphenol	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,4-Dinitrophenol	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2-Nitrophenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
4-Nitrophenol	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Pentachlorophenol	ND		1600		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Phenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
bis (2-Chloroisopropyl) ether	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
1,1'-Biphenyl	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1
Acetophenone	ND		330		ug/Kg		11/05/19 15:29	11/06/19 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*64*		*10 - 150*	*11/05/19 15:29*	*11/06/19 18:44*	*1*
2-Fluorophenol	*64*		*25 - 132*	*11/05/19 15:29*	*11/06/19 18:44*	*1*
2-Fluorobiphenyl	*86*		*38 - 130*	*11/05/19 15:29*	*11/06/19 18:44*	*1*
2,4,6-Tribromophenol	*87*		*10 - 148*	*11/05/19 15:29*	*11/06/19 18:44*	*1*
Terphenyl-d14	*103*		*53 - 134*	*11/05/19 15:29*	*11/06/19 18:44*	*1*
Phenol-d5 (Surr)	*68*		*27 - 123*	*11/05/19 15:29*	*11/06/19 18:44*	*1*

Client Sample ID: CBPSB0501GW

Date Collected: 10/30/19 07:30
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13.8**		10.0		ug/L			11/04/19 15:23	1
Benzene	ND		5.00		ug/L			11/04/19 15:23	1
Chlorobromomethane	ND		5.00		ug/L			11/04/19 15:23	1
Bromoform	ND		5.00		ug/L			11/04/19 15:23	1
Bromomethane	ND		10.0		ug/L			11/04/19 15:23	1
2-Butanone (MEK)	ND		10.0		ug/L			11/04/19 15:23	1
Carbon disulfide	ND		10.0		ug/L			11/04/19 15:23	1
Carbon tetrachloride	ND		5.00		ug/L			11/04/19 15:23	1
Dibromochloromethane	ND		5.00		ug/L			11/04/19 15:23	1
Chlorobenzene	ND		5.00		ug/L			11/04/19 15:23	1
Chloroethane	ND		10.0		ug/L			11/04/19 15:23	1
Chloroform	ND		10.0		ug/L			11/04/19 15:23	1
Chloromethane	ND		10.0		ug/L			11/04/19 15:23	1
1,1-Dichloroethane	ND		5.00		ug/L			11/04/19 15:23	1
1,2-Dichloroethane	ND		5.00		ug/L			11/04/19 15:23	1
1,1-Dichloroethene	ND		5.00		ug/L			11/04/19 15:23	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/04/19 15:23	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/04/19 15:23	1
1,2-Dichloropropane	ND		5.00		ug/L			11/04/19 15:23	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/04/19 15:23	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/04/19 15:23	1
Ethylbenzene	ND		5.00		ug/L			11/04/19 15:23	1
2-Hexanone	ND		10.0		ug/L			11/04/19 15:23	1
Methylene Chloride	ND		10.0		ug/L			11/04/19 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/04/19 15:23	1
Styrene	ND		5.00		ug/L			11/04/19 15:23	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/04/19 15:23	1
Tetrachloroethene	ND		5.00		ug/L			11/04/19 15:23	1
Toluene	ND		5.00		ug/L			11/04/19 15:23	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/04/19 15:23	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/04/19 15:23	1
Trichloroethene	ND		5.00		ug/L			11/04/19 15:23	1
Vinyl acetate	ND		10.0		ug/L			11/04/19 15:23	1
Vinyl chloride	ND		5.00		ug/L			11/04/19 15:23	1
o-Xylene	ND		5.00		ug/L			11/04/19 15:23	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/04/19 15:23	1
Xylenes, Total	ND		5.00		ug/L			11/04/19 15:23	1
Bromodichloromethane	ND		5.00		ug/L			11/04/19 15:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/04/19 15:23	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/04/19 15:23	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/04/19 15:23	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/04/19 15:23	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/04/19 15:23	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/04/19 15:23	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/04/19 15:23	1
1,2-Dibromoethane	ND		5.00		ug/L			11/04/19 15:23	1
Isopropylbenzene	ND		5.00		ug/L			11/04/19 15:23	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/04/19 15:23	1
Cyclohexane	ND		5.00		ug/L			11/04/19 15:23	1

Client Sample ID: CBPSB0501GW

Date Collected: 10/30/19 07:30
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*70 - 130*		*11/04/19 15:23*	*1*
Dibromofluoromethane	*78*		*62 - 130*		*11/04/19 15:23*	*1*
4-Bromofluorobenzene	*93*		*67 - 139*		*11/04/19 15:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*73*		*50 - 134*		*11/04/19 15:23*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Acenaphthylene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Anthracene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Benzo[a]anthracene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Benzo[b]fluoranthene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Benzo[k]fluoranthene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Benzo[g,h,i]perylene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Benzo[a]pyrene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Bis(2-chloroethoxy)methane	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Bis(2-chloroethyl)ether	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Bis(2-ethylhexyl) phthalate	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Butyl benzyl phthalate	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Chloroaniline	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Chloronaphthalene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Carbazole	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Chrysene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Di-n-butyl phthalate	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Dibenz(a,h)anthracene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Dibenzofuran	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
3,3'-Dichlorobenzidine	ND		20.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Diethyl phthalate	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Dimethyl phthalate	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4-Dinitrotoluene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,6-Dinitrotoluene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Di-n-octyl phthalate	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Fluoranthene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Fluorene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Hexachlorobenzene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Hexachlorocyclopentadiene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Hexachloroethane	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Hexachlorobutadiene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Indeno[1,2,3-cd]pyrene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Isophorone	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Methylnaphthalene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Naphthalene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Nitroaniline	ND		50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
3-Nitroaniline	ND		50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Nitroaniline	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Nitrobenzene	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
N-Nitrosodiphenylamine	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1

Client Sample ID: CBPSB0501GW
Date Collected: 10/30/19 07:30
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-5
Matrix: Water

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Pyrene	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Chloro-3-methylphenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Chlorophenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Methylphenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
3 & 4 Methylphenol	ND	*	20.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4-Dichlorophenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4-Dimethylphenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4,6-Dinitro-2-methylphenol	ND		50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4-Dinitrophenol	ND		50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2-Nitrophenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
4-Nitrophenol	ND	*	50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Pentachlorophenol	ND		50.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Phenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4,5-Trichlorophenol	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
bis (2-Chloroisopropyl) ether	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
1,1'-Biphenyl	ND		10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1
Acetophenone	ND	*	10.0		ug/L		11/05/19 09:03	11/06/19 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*24 - 150*	*11/05/19 09:03*	*11/06/19 00:18*	*1*
2-Fluorophenol	*46*		*10 - 130*	*11/05/19 09:03*	*11/06/19 00:18*	*1*
2-Fluorobiphenyl	*57*		*38 - 133*	*11/05/19 09:03*	*11/06/19 00:18*	*1*
2,4,6-Tribromophenol	*54*		*19 - 150*	*11/05/19 09:03*	*11/06/19 00:18*	*1*
Terphenyl-d14	*95*		*35 - 150*	*11/05/19 09:03*	*11/06/19 00:18*	*1*
Phenol-d5 (Surr)	*44*		*10 - 130*	*11/05/19 09:03*	*11/06/19 00:18*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND	^	0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Aluminum	**119**		0.500		mg/L		11/13/19 13:31	11/15/19 19:24	1
Arsenic	**0.0579**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Barium	**0.581**		0.0200		mg/L		11/13/19 13:31	11/15/19 19:24	1
Beryllium	**0.00590**		0.00500		mg/L		11/13/19 13:31	11/15/19 19:24	1
Calcium	**18.6**		1.00		mg/L		11/13/19 13:31	11/15/19 19:24	1
Cadmium	ND		0.00500		mg/L		11/13/19 13:31	11/15/19 19:24	1
Cobalt	**0.0738**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Chromium	**0.253**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Copper	**0.0673**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Iron	**132**		0.400		mg/L		11/13/19 13:31	11/15/19 19:24	1
Potassium	**7.88**		1.00		mg/L		11/13/19 13:31	11/15/19 19:24	1
Magnesium	**17.7**		1.00		mg/L		11/13/19 13:31	11/15/19 19:24	1
Manganese	**1.98**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Sodium	**4.49**		1.00		mg/L		11/13/19 13:31	11/15/19 19:24	1
Nickel	**0.0885**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Lead	**0.0829**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Antimony	ND		0.0500		mg/L		11/13/19 13:31	11/15/19 19:24	1
Selenium	ND		0.0400		mg/L		11/13/19 13:31	11/15/19 19:24	1
Thallium	ND		0.0300		mg/L		11/13/19 13:31	11/15/19 19:24	1

Client Sample ID: CBPSB0501GW

Lab Sample ID: 600-195078-5

Date Collected: 10/30/19 07:30
Matrix: Water
Date Received: 11/01/19 10:18

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.325**		0.0100		mg/L		11/13/19 13:31	11/15/19 19:24	1
Zinc	**0.285**		0.0300		mg/L		11/13/19 13:31	11/15/19 19:24	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.727**		0.250		ug/L		11/18/19 09:37	11/19/19 11:30	1

Client Sample ID: CBPSB0501GW

Lab Sample ID: 600-195078-6

Date Collected: 10/30/19 07:30
Matrix: Water
Date Received: 11/01/19 10:18

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Aluminum	ND		0.500		mg/L		11/26/19 13:45	11/29/19 12:48	1
Arsenic	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Barium	**0.0836**		0.0200		mg/L		11/26/19 13:45	11/29/19 12:48	1
Beryllium	ND		0.00500		mg/L		11/26/19 13:45	11/29/19 12:48	1
Calcium	**69.3**		1.00		mg/L		11/26/19 13:45	11/29/19 12:48	1
Cadmium	ND		0.00500		mg/L		11/26/19 13:45	11/29/19 12:48	1
Cobalt	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Chromium	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Copper	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Iron	ND		0.400		mg/L		11/26/19 13:45	11/29/19 12:48	1
Potassium	**3.50**		1.00		mg/L		11/26/19 13:45	11/29/19 12:48	1
Magnesium	**36.1**		1.00		mg/L		11/26/19 13:45	11/29/19 12:48	1
Manganese	**2.02**		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Sodium	**43.4**		1.00		mg/L		11/26/19 13:45	11/29/19 12:48	1
Nickel	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Lead	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Antimony	ND		0.0500		mg/L		11/26/19 13:45	11/29/19 12:48	1
Selenium	ND		0.0400		mg/L		11/26/19 13:45	11/29/19 12:48	1
Thallium	ND	^	0.0300		mg/L		11/26/19 13:45	11/29/19 12:48	1
Vanadium	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:48	1
Zinc	ND		0.0300		mg/L		11/26/19 13:45	11/29/19 12:48	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		11/18/19 09:37	11/19/19 11:32	1

Definitions/Glossary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
*	RPD of the LCS and LCSD exceeds the control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Surrogate Summary

Client: HDR Inc
Project/Site: City BLock Parcel - Paducah KY

Job ID: 600-195078-1
SDG: Paduckah Downtown Development Project

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(57-140)	(68-140)	(61-130)	(50-130)
600-195078-1	CBPSB04010406	145 X	96	93	104
600-195078-2	CBPSB04012830	123	102	95	106
600-195078-3	CBPSB05010608	115	100	91	107
600-195078-4	CBPSB05012225	147 X	101	101	102
LCS 600-279826/4	Lab Control Sample	92	91	98	112
LCSD 600-279826/5	Lab Control Sample Dup	82	87	99	85
MB 600-279826/7	Method Blank	128	99	108	99

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-195078-5	CBPSB0501GW	82	78	93	73
LCS 600-279301/4	Lab Control Sample	87	86	92	79
LCSD 600-279301/5	Lab Control Sample Dup	88	86	94	82
MB 600-279301/7	Method Blank	85	78	93	72

Surrogate Legend

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

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(10-150)	(25-132)	(38-130)	(10-148)	(53-134)	(27-123)
600-195078-1	CBPSB04010406	57	55	69	69	84	58
600-195078-2	CBPSB04012830	87	85	96	109	127	85
600-195078-3	CBPSB05010608	70	71	87	94	91	76
600-195078-3 MS	CBPSB05010608	86	110	93	96	102	113
600-195078-3 MSD	CBPSB05010608	69	106	90	90	101	109
600-195078-4	CBPSB05012225	64	64	86	87	103	68
LCS 600-279502/2-A	Lab Control Sample	86	106	94	100	107	114
MB 600-279502/1-A	Method Blank	49	47	55	41	58	48

Surrogate Legend

NBZ = Nitrobenzene-d5
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Surrogate Summary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

PHL = Phenol-d5 (Surr)

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(24-150)	(10-130)	(38-133)	(19-150)	(35-150)	(10-130)
600-195078-5	CBPSB0501GW	66	46	57	54	95	44
LB 600-279309/1-C	Method Blank	79	59	63	35	100	70
LCS 600-279425/2-A	Lab Control Sample	113	100	91	74	116	118
LCSD 600-279425/3-A	Lab Control Sample Dup	85	63	73	61	104	66
MB 600-279425/1-A	Method Blank	101	81	85	59	108	89

Surrogate Legend

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

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Matrix: Water **Prep Type: SPLP West**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(24-150)	(10-130)	(38-133)	(19-150)	(35-150)	(10-130)
600-194930-A-1-G MS	Matrix Spike	106	81	84	74	117	90

Surrogate Legend

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

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

Lab Sample ID: MB 600-279301/7
Matrix: Water
Analysis Batch: 279301

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L			11/04/19 11:53	1
Benzene	ND		5.00		ug/L			11/04/19 11:53	1
Bromoform	ND		5.00		ug/L			11/04/19 11:53	1
Bromomethane	ND		10.0		ug/L			11/04/19 11:53	1
2-Butanone (MEK)	ND		10.0		ug/L			11/04/19 11:53	1
Carbon disulfide	ND		10.0		ug/L			11/04/19 11:53	1
Carbon tetrachloride	ND		5.00		ug/L			11/04/19 11:53	1
Chlorobenzene	ND		5.00		ug/L			11/04/19 11:53	1
Chlorobromomethane	ND		5.00		ug/L			11/04/19 11:53	1
Chloroethane	ND		10.0		ug/L			11/04/19 11:53	1
Chloroform	ND		10.0		ug/L			11/04/19 11:53	1
Chloromethane	ND		10.0		ug/L			11/04/19 11:53	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/04/19 11:53	1
Dibromochloromethane	ND		5.00		ug/L			11/04/19 11:53	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/04/19 11:53	1
1,1-Dichloroethane	ND		5.00		ug/L			11/04/19 11:53	1
1,2-Dichloroethane	ND		5.00		ug/L			11/04/19 11:53	1
1,1-Dichloroethene	ND		5.00		ug/L			11/04/19 11:53	1
1,2-Dichloropropane	ND		5.00		ug/L			11/04/19 11:53	1
Ethylbenzene	ND		5.00		ug/L			11/04/19 11:53	1
2-Hexanone	ND		10.0		ug/L			11/04/19 11:53	1
Methylene Chloride	ND		10.0		ug/L			11/04/19 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/04/19 11:53	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/04/19 11:53	1
o-Xylene	ND		5.00		ug/L			11/04/19 11:53	1
Styrene	ND		5.00		ug/L			11/04/19 11:53	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/04/19 11:53	1
Tetrachloroethene	ND		5.00		ug/L			11/04/19 11:53	1
Bromodichloromethane	ND		5.00		ug/L			11/04/19 11:53	1
Toluene	ND		5.00		ug/L			11/04/19 11:53	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/04/19 11:53	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/04/19 11:53	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/04/19 11:53	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/04/19 11:53	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/04/19 11:53	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/04/19 11:53	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/04/19 11:53	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/04/19 11:53	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/04/19 11:53	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/04/19 11:53	1
Trichloroethene	ND		5.00		ug/L			11/04/19 11:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/04/19 11:53	1
1,2-Dibromoethane	ND		5.00		ug/L			11/04/19 11:53	1
Isopropylbenzene	ND		5.00		ug/L			11/04/19 11:53	1
Vinyl acetate	ND		10.0		ug/L			11/04/19 11:53	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/04/19 11:53	1
Vinyl chloride	ND		5.00		ug/L			11/04/19 11:53	1
Cyclohexane	ND		5.00		ug/L			11/04/19 11:53	1

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

Lab Sample ID: MB 600-279301/7
Matrix: Water
Analysis Batch: 279301

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		5.00		ug/L			11/04/19 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*78*		*62 - 130*		*11/04/19 11:53*	*1*
4-Bromofluorobenzene	*93*		*67 - 139*		*11/04/19 11:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*72*		*50 - 134*		*11/04/19 11:53*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*11/04/19 11:53*	*1*

Lab Sample ID: LCS 600-279301/4
Matrix: Water
Analysis Batch: 279301

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	67.63		ug/L		68	21 - 148
Benzene	50.0	44.85		ug/L		90	70 - 131
Bromoform	50.0	41.48		ug/L		83	67 - 134
Bromomethane	50.0	43.62		ug/L		87	45 - 150
2-Butanone (MEK)	100	71.72		ug/L		72	34 - 140
Carbon disulfide	50.0	48.05		ug/L		96	60 - 146
Carbon tetrachloride	50.0	48.12		ug/L		96	68 - 140
Chlorobenzene	50.0	43.88		ug/L		88	70 - 130
Chlorobromomethane	50.0	43.81		ug/L		88	70 - 130
Chloroethane	50.0	50.56		ug/L		101	65 - 138
Chloroform	50.0	42.52		ug/L		85	70 - 131
Chloromethane	50.0	40.00		ug/L		80	15 - 150
cis-1,2-Dichloroethene	50.0	43.77		ug/L		88	70 - 130
Dibromochloromethane	50.0	41.84		ug/L		84	70 - 130
cis-1,3-Dichloropropene	50.0	42.16		ug/L		84	66 - 130
1,1-Dichloroethane	50.0	43.64		ug/L		87	70 - 137
1,2-Dichloroethane	50.0	39.98		ug/L		80	62 - 144
1,1-Dichloroethene	50.0	50.35		ug/L		101	67 - 134
1,2-Dichloropropane	50.0	43.54		ug/L		87	70 - 133
Ethylbenzene	50.0	44.61		ug/L		89	70 - 130
2-Hexanone	100	83.32		ug/L		83	46 - 139
Methylene Chloride	50.0	41.54		ug/L		83	67 - 130
4-Methyl-2-pentanone (MIBK)	100	82.59		ug/L		83	39 - 150
m-Xylene & p-Xylene	50.0	44.66		ug/L		89	70 - 130
o-Xylene	50.0	43.54		ug/L		87	69 - 130
Styrene	50.0	44.58		ug/L		89	70 - 130
1,1,2,2-Tetrachloroethane	50.0	40.56		ug/L		81	62 - 130
Tetrachloroethene	50.0	47.19		ug/L		94	57 - 130
Bromodichloromethane	50.0	42.76		ug/L		86	70 - 130
Toluene	50.0	43.29		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	43.17		ug/L		86	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.92		ug/L		88	39 - 150
trans-1,3-Dichloropropene	50.0	42.04		ug/L		84	70 - 138
1,2,4-Trichlorobenzene	50.0	42.10		ug/L		84	33 - 144
1,2-Dichlorobenzene	50.0	43.19		ug/L		86	69 - 130

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

Lab Sample ID: LCS 600-279301/4
Matrix: Water
Analysis Batch: 279301

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	50.0	46.52		ug/L		93	67 - 139
1,3-Dichlorobenzene	50.0	43.27		ug/L		87	70 - 130
1,1,2-Trichloroethane	50.0	42.74		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.53		ug/L		85	70 - 130
Dichlorodifluoromethane	50.0	42.61		ug/L		85	10 - 150
Trichloroethene	50.0	46.23		ug/L		92	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.75		ug/L		103	39 - 150
1,2-Dibromoethane	50.0	41.66		ug/L		83	70 - 130
Isopropylbenzene	50.0	46.10		ug/L		92	70 - 130
Vinyl acetate	100	82.00		ug/L		82	22 - 150
Methyl tert-butyl ether	50.0	39.69		ug/L		79	63 - 134
Vinyl chloride	50.0	39.53		ug/L		79	55 - 150
Cyclohexane	50.0	53.03		ug/L		106	10 - 150
Xylenes, Total	100	88.20		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*86*		*62 - 130*
4-Bromofluorobenzene	*92*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
Toluene-d8 (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 600-279301/5
Matrix: Water
Analysis Batch: 279301

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	67.42		ug/L		67	21 - 148	0	20
Benzene	50.0	45.14		ug/L		90	70 - 131	1	20
Bromoform	50.0	44.08		ug/L		88	67 - 134	6	20
Bromomethane	50.0	44.74		ug/L		89	45 - 150	3	20
2-Butanone (MEK)	100	76.80		ug/L		77	34 - 140	7	20
Carbon disulfide	50.0	49.04		ug/L		98	60 - 146	2	20
Carbon tetrachloride	50.0	44.89		ug/L		90	68 - 140	7	20
Chlorobenzene	50.0	43.94		ug/L		88	70 - 130	0	20
Chlorobromomethane	50.0	44.10		ug/L		88	70 - 130	1	20
Chloroethane	50.0	50.29		ug/L		101	65 - 138	1	20
Chloroform	50.0	42.88		ug/L		86	70 - 131	1	20
Chloromethane	50.0	38.05		ug/L		76	15 - 150	5	20
cis-1,2-Dichloroethene	50.0	45.41		ug/L		91	70 - 130	4	20
Dibromochloromethane	50.0	42.57		ug/L		85	70 - 130	2	20
cis-1,3-Dichloropropene	50.0	43.46		ug/L		87	66 - 130	3	20
1,1-Dichloroethane	50.0	45.51		ug/L		91	70 - 137	4	20
1,2-Dichloroethane	50.0	40.33		ug/L		81	62 - 144	1	20
1,1-Dichloroethene	50.0	51.48		ug/L		103	67 - 134	2	20
1,2-Dichloropropane	50.0	44.40		ug/L		89	70 - 133	2	20
Ethylbenzene	50.0	44.31		ug/L		89	70 - 130	1	20
2-Hexanone	100	84.67		ug/L		85	46 - 139	2	20
Methylene Chloride	50.0	45.01		ug/L		90	67 - 130	8	20

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

Lab Sample ID: LCSD 600-279301/5
Matrix: Water
Analysis Batch: 279301

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)			100	84.49		ug/L		84	39 - 150	2	20
m-Xylene & p-Xylene			50.0	44.98		ug/L		90	70 - 130	1	20
o-Xylene			50.0	44.34		ug/L		89	69 - 130	2	20
Styrene			50.0	45.50		ug/L		91	70 - 130	2	20
1,1,2,2-Tetrachloroethane			50.0	41.60		ug/L		83	62 - 130	3	20
Tetrachloroethene			50.0	46.51		ug/L		93	57 - 130	1	20
Bromodichloromethane			50.0	42.56		ug/L		85	70 - 130	0	20
Toluene			50.0	44.70		ug/L		89	70 - 130	3	20
trans-1,2-Dichloroethene			50.0	46.05		ug/L		92	70 - 130	6	20
1,2-Dibromo-3-Chloropropane			50.0	44.58		ug/L		89	39 - 150	1	20
trans-1,3-Dichloropropene			50.0	43.06		ug/L		86	70 - 138	2	20
1,2,4-Trichlorobenzene			50.0	41.28		ug/L		83	33 - 144	2	20
1,2-Dichlorobenzene			50.0	43.70		ug/L		87	69 - 130	1	20
1,1,1-Trichloroethane			50.0	45.58		ug/L		91	67 - 139	2	20
1,3-Dichlorobenzene			50.0	44.07		ug/L		88	70 - 130	2	20
1,1,2-Trichloroethane			50.0	42.70		ug/L		85	70 - 130	0	20
1,4-Dichlorobenzene			50.0	43.51		ug/L		87	70 - 130	2	20
Dichlorodifluoromethane			50.0	36.25		ug/L		72	10 - 150	16	20
Trichloroethene			50.0	46.65		ug/L		93	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	44.94		ug/L		90	39 - 150	14	20
1,2-Dibromoethane			50.0	42.38		ug/L		85	70 - 130	2	20
Isopropylbenzene			50.0	46.16		ug/L		92	70 - 130	0	20
Vinyl acetate			100	87.91		ug/L		88	22 - 150	7	20
Methyl tert-butyl ether			50.0	44.19		ug/L		88	63 - 134	11	20
Vinyl chloride			50.0	37.41		ug/L		75	55 - 150	6	20
Cyclohexane			50.0	46.34		ug/L		93	10 - 150	13	20
Xylenes, Total			100	89.32		ug/L		89	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane	*86*		*62 - 130*
4-Bromofluorobenzene	*94*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*
Toluene-d8 (Surr)	*88*		*70 - 130*

Lab Sample ID: MB 600-279826/7
Matrix: Solid
Analysis Batch: 279826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/Kg			11/08/19 14:32	1
Benzene	ND		5.00		ug/Kg			11/08/19 14:32	1
Bromoform	ND		5.00		ug/Kg			11/08/19 14:32	1
Bromomethane	ND		10.0		ug/Kg			11/08/19 14:32	1
2-Butanone (MEK)	ND		10.0		ug/Kg			11/08/19 14:32	1
Carbon disulfide	ND		10.0		ug/Kg			11/08/19 14:32	1
Carbon tetrachloride	ND		5.00		ug/Kg			11/08/19 14:32	1
Chlorobenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
Chlorobromomethane	ND		5.00		ug/Kg			11/08/19 14:32	1

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

Lab Sample ID: MB 600-279826/7
Matrix: Solid
Analysis Batch: 279826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		10.0		ug/Kg			11/08/19 14:32	1
Chloroform	ND		10.0		ug/Kg			11/08/19 14:32	1
Chloromethane	ND		10.0		ug/Kg			11/08/19 14:32	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg			11/08/19 14:32	1
Dibromochloromethane	ND		5.00		ug/Kg			11/08/19 14:32	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1-Dichloroethane	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2-Dichloroethane	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1-Dichloroethene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2-Dichloropropane	ND		5.00		ug/Kg			11/08/19 14:32	1
Ethylbenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
2-Hexanone	ND		10.0		ug/Kg			11/08/19 14:32	1
Methylene Chloride	ND		10.0		ug/Kg			11/08/19 14:32	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg			11/08/19 14:32	1
m-Xylene & p-Xylene	ND		5.00		ug/Kg			11/08/19 14:32	1
o-Xylene	ND		5.00		ug/Kg			11/08/19 14:32	1
Styrene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg			11/08/19 14:32	1
Tetrachloroethene	ND		5.00		ug/Kg			11/08/19 14:32	1
Bromodichloromethane	ND		5.00		ug/Kg			11/08/19 14:32	1
Toluene	ND		5.00		ug/Kg			11/08/19 14:32	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/Kg			11/08/19 14:32	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg			11/08/19 14:32	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1,2-Trichloroethane	ND		40.0		ug/Kg			11/08/19 14:32	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
Dichlorodifluoromethane	ND		5.00		ug/Kg			11/08/19 14:32	1
Trichloroethene	ND		5.00		ug/Kg			11/08/19 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/Kg			11/08/19 14:32	1
1,2-Dibromoethane	ND		5.00		ug/Kg			11/08/19 14:32	1
Isopropylbenzene	ND		5.00		ug/Kg			11/08/19 14:32	1
Vinyl acetate	ND		10.0		ug/Kg			11/08/19 14:32	1
Methyl tert-butyl ether	ND		5.00		ug/Kg			11/08/19 14:32	1
Vinyl chloride	ND		10.0		ug/Kg			11/08/19 14:32	1
Cyclohexane	ND		5.00		ug/Kg			11/08/19 14:32	1
Xylenes, Total	ND		5.00		ug/Kg			11/08/19 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99*		*68 - 140*		*11/08/19 14:32*	*1*
4-Bromofluorobenzene	*128*		*57 - 140*		*11/08/19 14:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*		*11/08/19 14:32*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*		*11/08/19 14:32*	*1*

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

Lab Sample ID: LCS 600-279826/4
Matrix: Solid
Analysis Batch: 279826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	102.1		ug/Kg		102	13 - 150
Benzene	50.0	42.58		ug/Kg		85	70 - 131
Bromoform	50.0	40.15		ug/Kg		80	43 - 150
Bromomethane	50.0	47.23		ug/Kg		94	37 - 147
2-Butanone (MEK)	100	75.47		ug/Kg		75	33 - 150
Carbon disulfide	50.0	39.67		ug/Kg		79	51 - 141
Carbon tetrachloride	50.0	53.72		ug/Kg		107	58 - 130
Chlorobenzene	50.0	42.09		ug/Kg		84	63 - 131
Chlorobromomethane	50.0	44.42		ug/Kg		89	70 - 132
Chloroethane	50.0	47.85		ug/Kg		96	40 - 150
Chloroform	50.0	45.73		ug/Kg		91	69 - 130
Chloromethane	50.0	49.68		ug/Kg		99	44 - 141
cis-1,2-Dichloroethene	50.0	43.84		ug/Kg		88	70 - 130
Dibromochloromethane	50.0	51.24		ug/Kg		102	65 - 134
cis-1,3-Dichloropropene	50.0	54.83		ug/Kg		110	65 - 130
1,1-Dichloroethane	50.0	47.40		ug/Kg		95	63 - 140
1,2-Dichloroethane	50.0	49.67		ug/Kg		99	58 - 137
1,1-Dichloroethene	50.0	48.50		ug/Kg		97	62 - 142
1,2-Dichloropropane	50.0	42.96		ug/Kg		86	70 - 130
Ethylbenzene	50.0	43.99		ug/Kg		88	66 - 130
2-Hexanone	100	123.8		ug/Kg		124	35 - 150
Methylene Chloride	50.0	38.87		ug/Kg		78	61 - 150
4-Methyl-2-pentanone (MIBK)	100	104.7		ug/Kg		105	21 - 150
m-Xylene & p-Xylene	50.0	46.00		ug/Kg		92	64 - 130
o-Xylene	50.0	45.41		ug/Kg		91	62 - 130
Styrene	50.0	44.87		ug/Kg		90	65 - 133
1,1,2,2-Tetrachloroethane	50.0	48.73		ug/Kg		97	61 - 138
Tetrachloroethene	50.0	56.99		ug/Kg		114	43 - 143
Bromodichloromethane	50.0	46.68		ug/Kg		93	67 - 138
Toluene	50.0	56.04		ug/Kg		112	67 - 130
trans-1,2-Dichloroethene	50.0	45.47		ug/Kg		91	69 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.12		ug/Kg		94	29 - 150
trans-1,3-Dichloropropene	50.0	55.33		ug/Kg		111	70 - 130
1,2,4-Trichlorobenzene	50.0	61.46		ug/Kg		123	53 - 136
1,2-Dichlorobenzene	50.0	46.46		ug/Kg		93	61 - 131
1,1,1-Trichloroethane	50.0	53.01		ug/Kg		106	59 - 130
1,3-Dichlorobenzene	50.0	45.30		ug/Kg		91	63 - 132
1,1,2-Trichloroethane	50.0	54.97		ug/Kg		110	67 - 134
1,4-Dichlorobenzene	50.0	44.35		ug/Kg		89	65 - 131
Dichlorodifluoromethane	50.0	35.88		ug/Kg		72	24 - 147
Trichloroethene	50.0	45.52		ug/Kg		91	63 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.18		ug/Kg		90	48 - 150
1,2-Dibromoethane	50.0	53.73		ug/Kg		107	65 - 136
Isopropylbenzene	50.0	50.20		ug/Kg		100	64 - 131
Vinyl acetate	100	111.7		ug/Kg		112	40 - 150
Methyl tert-butyl ether	50.0	49.51		ug/Kg		99	63 - 132
Vinyl chloride	50.0	42.74		ug/Kg		85	40 - 148
Cyclohexane	50.0	47.75		ug/Kg		96	54 - 130

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

Lab Sample ID: LCS 600-279826/4
Matrix: Solid
Analysis Batch: 279826

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			100	91.41		ug/Kg		91	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*91*		*68 - 140*
4-Bromofluorobenzene	*92*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*
Toluene-d8 (Surr)	*112*		*50 - 130*

Lab Sample ID: LCSD 600-279826/5
Matrix: Solid
Analysis Batch: 279826

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	109.1		ug/Kg		109	13 - 150	7	30
Benzene			50.0	39.65		ug/Kg		79	70 - 131	7	30
Bromoform			50.0	48.86		ug/Kg		98	43 - 150	20	30
Bromomethane			50.0	51.99		ug/Kg		104	37 - 147	10	30
2-Butanone (MEK)			100	87.02		ug/Kg		87	33 - 150	14	30
Carbon disulfide			50.0	39.95		ug/Kg		80	51 - 141	1	30
Carbon tetrachloride			50.0	47.33		ug/Kg		95	58 - 130	13	30
Chlorobenzene			50.0	43.82		ug/Kg		88	63 - 131	4	30
Chlorobromomethane			50.0	44.99		ug/Kg		90	70 - 132	1	30
Chloroethane			50.0	51.51		ug/Kg		103	40 - 150	7	30
Chloroform			50.0	42.93		ug/Kg		86	69 - 130	6	30
Chloromethane			50.0	58.17		ug/Kg		116	44 - 141	16	30
cis-1,2-Dichloroethene			50.0	41.54		ug/Kg		83	70 - 130	5	30
Dibromochloromethane			50.0	49.87		ug/Kg		100	65 - 134	3	30
cis-1,3-Dichloropropene			50.0	44.29		ug/Kg		89	65 - 130	21	30
1,1-Dichloroethane			50.0	43.71		ug/Kg		87	63 - 140	8	30
1,2-Dichloroethane			50.0	50.66		ug/Kg		101	58 - 137	2	30
1,1-Dichloroethene			50.0	44.55		ug/Kg		89	62 - 142	9	30
1,2-Dichloropropane			50.0	41.74		ug/Kg		83	70 - 130	3	30
Ethylbenzene			50.0	42.40		ug/Kg		85	66 - 130	4	30
2-Hexanone			100	122.0		ug/Kg		122	35 - 150	1	30
Methylene Chloride			50.0	39.65		ug/Kg		79	61 - 150	2	30
4-Methyl-2-pentanone (MIBK)			100	118.0		ug/Kg		118	21 - 150	12	30
m-Xylene & p-Xylene			50.0	42.33		ug/Kg		85	64 - 130	8	30
o-Xylene			50.0	42.11		ug/Kg		84	62 - 130	8	30
Styrene			50.0	43.21		ug/Kg		86	65 - 133	4	30
1,1,2,2-Tetrachloroethane			50.0	44.93		ug/Kg		90	61 - 138	8	30
Tetrachloroethene			50.0	43.14		ug/Kg		86	43 - 143	28	30
Bromodichloromethane			50.0	45.72		ug/Kg		91	67 - 138	2	30
Toluene			50.0	42.19		ug/Kg		84	67 - 130	28	30
trans-1,2-Dichloroethene			50.0	40.17		ug/Kg		80	69 - 130	12	30
1,2-Dibromo-3-Chloropropane			50.0	52.54		ug/Kg		105	29 - 150	11	30
trans-1,3-Dichloropropene			50.0	46.55		ug/Kg		93	70 - 130	17	30
1,2,4-Trichlorobenzene			50.0	32.90	*	ug/Kg		66	53 - 136	61	30
1,2-Dichlorobenzene			50.0	42.13		ug/Kg		84	61 - 131	10	30

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

Lab Sample ID: LCSD 600-279826/5
Matrix: Solid
Analysis Batch: 279826

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	46.67		ug/Kg		93	59 - 130	13	30
1,3-Dichlorobenzene			50.0	42.12		ug/Kg		84	63 - 132	7	30
1,1,2-Trichloroethane			50.0	46.61		ug/Kg		93	67 - 134	16	30
1,4-Dichlorobenzene			50.0	41.29		ug/Kg		83	65 - 131	7	30
Dichlorodifluoromethane			50.0	37.86		ug/Kg		76	24 - 147	5	30
Trichloroethene			50.0	41.81		ug/Kg		84	63 - 135	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	43.79		ug/Kg		88	48 - 150	3	30
1,2-Dibromoethane			50.0	49.74		ug/Kg		99	65 - 136	8	30
Isopropylbenzene			50.0	41.35		ug/Kg		83	64 - 131	19	30
Vinyl acetate			100	106.7		ug/Kg		107	40 - 150	5	30
Methyl tert-butyl ether			50.0	49.05		ug/Kg		98	63 - 132	1	30
Vinyl chloride			50.0	46.43		ug/Kg		93	40 - 148	8	30
Cyclohexane			50.0	41.29		ug/Kg		83	54 - 130	15	30
Xylenes, Total			100	84.44		ug/Kg		84	63 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane	*87*		*68 - 140*
4-Bromofluorobenzene	*82*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*
Toluene-d8 (Surr)	*85*		*50 - 130*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: LB 600-279309/1-C
Matrix: Water
Analysis Batch: 279485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279425

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Acenaphthylene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Anthracene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Benzo[a]anthracene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Benzo[b]fluoranthene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Benzo[k]fluoranthene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Benzo[g,h,i]perylene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Benzo[a]pyrene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Bis(2-chloroethoxy)methane	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Bis(2-chloroethyl)ether	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Bis(2-ethylhexyl) phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Bromophenyl phenyl ether	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Butyl benzyl phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Chloroaniline	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Chloronaphthalene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Chlorophenyl phenyl ether	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Carbazole	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Chrysene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Di-n-butyl phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Dibenz(a,h)anthracene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LB 600-279309/1-C
Matrix: Water
Analysis Batch: 279485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279425

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
3,3'-Dichlorobenzidine	ND		100		ug/L		11/05/19 09:03	11/05/19 20:12	1
Diethyl phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Dimethyl phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4-Dinitrotoluene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,6-Dinitrotoluene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Di-n-octyl phthalate	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Fluoranthene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Fluorene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Hexachlorobenzene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Hexachlorocyclopentadiene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Hexachloroethane	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Hexachlorobutadiene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Indeno[1,2,3-cd]pyrene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Isophorone	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Methylnaphthalene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Naphthalene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Nitroaniline	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
3-Nitroaniline	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Nitroaniline	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Nitrobenzene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
N-Nitrosodiphenylamine	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
N-Nitrosodi-n-propylamine	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Phenanthrene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Pyrene	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Chloro-3-methylphenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Chlorophenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Methylphenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
3 & 4 Methylphenol	ND		100		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4-Dichlorophenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4-Dimethylphenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4,6-Dinitro-2-methylphenol	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4-Dinitrophenol	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
2-Nitrophenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
4-Nitrophenol	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
Pentachlorophenol	ND		250		ug/L		11/05/19 09:03	11/05/19 20:12	1
Phenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4,5-Trichlorophenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
2,4,6-Trichlorophenol	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
bis (2-Chloroisopropyl) ether	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
1,1'-Biphenyl	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1
Acetophenone	ND		50.0		ug/L		11/05/19 09:03	11/05/19 20:12	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*24 - 150*	*11/05/19 09:03*	*11/05/19 20:12*	*1*
2-Fluorophenol	*59*		*10 - 130*	*11/05/19 09:03*	*11/05/19 20:12*	*1*
2-Fluorobiphenyl	*63*		*38 - 133*	*11/05/19 09:03*	*11/05/19 20:12*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LB 600-279309/1-C
Matrix: Water
Analysis Batch: 279485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279425

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*35*		*19 - 150*	*11/05/19 09:03*	*11/05/19 20:12*	*1*
Terphenyl-d14	*100*		*35 - 150*	*11/05/19 09:03*	*11/05/19 20:12*	*1*
Phenol-d5 (Surr)	*70*		*10 - 130*	*11/05/19 09:03*	*11/05/19 20:12*	*1*

Lab Sample ID: MB 600-279425/1-A
Matrix: Water
Analysis Batch: 279485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Acenaphthylene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Anthracene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Benzo[a]anthracene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Benzo[b]fluoranthene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Benzo[k]fluoranthene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Benzo[g,h,i]perylene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Benzo[a]pyrene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Bis(2-ethylhexyl) phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Butyl benzyl phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Chloroaniline	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Chloronaphthalene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Carbazole	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Chrysene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Di-n-butyl phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Dibenz(a,h)anthracene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Dibenzofuran	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
3,3'-Dichlorobenzidine	ND		20.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Diethyl phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Dimethyl phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4-Dinitrotoluene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,6-Dinitrotoluene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Di-n-octyl phthalate	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Fluoranthene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Fluorene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Hexachlorobenzene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Hexachloroethane	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Hexachlorobutadiene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Indeno[1,2,3-cd]pyrene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Isophorone	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Methylnaphthalene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Naphthalene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Nitroaniline	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: MB 600-279425/1-A
Matrix: Water
Analysis Batch: 279485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Nitroaniline	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Nitrobenzene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
N-Nitrosodiphenylamine	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Phenanthrene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Pyrene	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Chlorophenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Methylphenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
3 & 4 Methylphenol	ND		20.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4-Dichlorophenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4-Dimethylphenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4,6-Dinitro-2-methylphenol	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4-Dinitrophenol	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2-Nitrophenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
4-Nitrophenol	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Pentachlorophenol	ND		50.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Phenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4,5-Trichlorophenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
bis (2-Chloroisopropyl) ether	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
1,1'-Biphenyl	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1
Acetophenone	ND		10.0		ug/L		11/05/19 09:02	11/05/19 17:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*24 - 150*	*11/05/19 09:02*	*11/05/19 17:20*	*1*
2-Fluorophenol	*81*		*10 - 130*	*11/05/19 09:02*	*11/05/19 17:20*	*1*
2-Fluorobiphenyl	*85*		*38 - 133*	*11/05/19 09:02*	*11/05/19 17:20*	*1*
2,4,6-Tribromophenol	*59*		*19 - 150*	*11/05/19 09:02*	*11/05/19 17:20*	*1*
Terphenyl-d14	*108*		*35 - 150*	*11/05/19 09:02*	*11/05/19 17:20*	*1*
Phenol-d5 (Surr)	*89*		*10 - 130*	*11/05/19 09:02*	*11/05/19 17:20*	*1*

Lab Sample ID: LCS 600-279425/2-A
Matrix: Water
Analysis Batch: 279568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	37.54		ug/L		94	42 - 130
Acenaphthylene	40.0	35.92		ug/L		90	41 - 130
Anthracene	40.0	41.09		ug/L		103	48 - 130
Benzo[a]anthracene	40.0	44.40		ug/L		111	47 - 130
Benzo[b]fluoranthene	40.0	47.50		ug/L		119	47 - 130
Benzo[k]fluoranthene	40.0	47.90		ug/L		120	44 - 131
Benzo[g,h,i]perylene	40.0	44.58		ug/L		111	42 - 138
Benzo[a]pyrene	40.0	45.12		ug/L		113	52 - 130
Bis(2-chloroethoxy)methane	40.0	46.84		ug/L		117	42 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-279425/2-A
Matrix: Water
Analysis Batch: 279568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	40.0	46.15		ug/L		115	35 - 130
Bis(2-ethylhexyl) phthalate	40.0	60.97	*	ug/L		152	34 - 139
4-Bromophenyl phenyl ether	40.0	39.01		ug/L		98	44 - 130
Butyl benzyl phthalate	40.0	57.03		ug/L		143	22 - 150
4-Chloroaniline	40.0	15.18		ug/L		38	19 - 130
2-Chloronaphthalene	40.0	36.78		ug/L		92	39 - 130
4-Chlorophenyl phenyl ether	40.0	38.21		ug/L		96	37 - 130
Carbazole	40.0	42.57		ug/L		106	49 - 130
Chrysene	40.0	45.41		ug/L		114	46 - 130
Di-n-butyl phthalate	40.0	47.88		ug/L		120	50 - 130
Dibenz(a,h)anthracene	40.0	43.23		ug/L		108	46 - 132
Dibenzofuran	40.0	36.42		ug/L		91	42 - 130
3,3'-Dichlorobenzidine	40.0	24.89		ug/L		62	10 - 150
Diethyl phthalate	40.0	39.18		ug/L		98	42 - 130
Dimethyl phthalate	40.0	37.15		ug/L		93	43 - 130
2,4-Dinitrotoluene	40.0	39.46		ug/L		99	48 - 130
2,6-Dinitrotoluene	40.0	36.81		ug/L		92	43 - 130
Di-n-octyl phthalate	40.0	56.96	*	ug/L		142	40 - 132
Fluoranthene	40.0	38.99		ug/L		97	52 - 130
Fluorene	40.0	39.24		ug/L		98	39 - 130
Hexachlorobenzene	40.0	35.80		ug/L		90	45 - 130
Hexachlorocyclopentadiene	40.0	30.24		ug/L		76	14 - 130
Hexachloroethane	40.0	45.66		ug/L		114	37 - 130
Hexachlorobutadiene	40.0	33.08		ug/L		83	35 - 130
Indeno[1,2,3-cd]pyrene	40.0	60.19	*	ug/L		150	38 - 132
Isophorone	40.0	43.00		ug/L		108	39 - 130
2-Methylnaphthalene	40.0	51.41		ug/L		129	40 - 130
Naphthalene	40.0	37.67		ug/L		94	41 - 130
2-Nitroaniline	40.0	49.13	J	ug/L		123	39 - 130
3-Nitroaniline	40.0	32.75	J	ug/L		82	33 - 130
4-Nitroaniline	40.0	32.90		ug/L		82	37 - 130
Nitrobenzene	40.0	59.13	*	ug/L		148	44 - 130
N-Nitrosodiphenylamine	40.0	41.22		ug/L		103	30 - 134
N-Nitrosodi-n-propylamine	40.0	48.99		ug/L		122	37 - 130
Phenanthrene	40.0	42.21		ug/L		106	47 - 130
Pyrene	40.0	46.11		ug/L		115	41 - 130
4-Chloro-3-methylphenol	40.0	42.43		ug/L		106	43 - 130
2-Chlorophenol	40.0	41.10		ug/L		103	36 - 130
2-Methylphenol	40.0	42.99		ug/L		107	37 - 130
3 & 4 Methylphenol	40.0	44.39		ug/L		111	39 - 130
2,4-Dichlorophenol	40.0	36.79		ug/L		92	41 - 130
2,4-Dimethylphenol	40.0	39.90		ug/L		100	32 - 130
4,6-Dinitro-2-methylphenol	80.0	96.10		ug/L		120	49 - 130
2,4-Dinitrophenol	80.0	68.69		ug/L		86	34 - 130
2-Nitrophenol	40.0	42.21		ug/L		106	43 - 130
4-Nitrophenol	80.0	105.9		ug/L		132	10 - 133
Pentachlorophenol	80.0	43.95	J	ug/L		55	34 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-279425/2-A
Matrix: Water
Analysis Batch: 279568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	40.0	40.61		ug/L		102	21 - 130
2,4,5-Trichlorophenol	40.0	34.14		ug/L		85	39 - 130
2,4,6-Trichlorophenol	40.0	35.60		ug/L		89	36 - 130
bis (2-Chloroisopropyl) ether	40.0	52.65	*	ug/L		132	29 - 130
1,1'-Biphenyl	40.0	38.18		ug/L		95	37 - 130
Acetophenone	40.0	42.72		ug/L		107	39 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*113*		*24 - 150*
2-Fluorophenol	*100*		*10 - 130*
2-Fluorobiphenyl	*91*		*38 - 133*
2,4,6-Tribromophenol	*74*		*19 - 150*
Terphenyl-d14	*116*		*35 - 150*
Phenol-d5 (Surr)	*118*		*10 - 130*

Lab Sample ID: LCSD 600-279425/3-A
Matrix: Water
Analysis Batch: 279568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 279425

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	40.0	32.31		ug/L		81	42 - 130	15	20
Acenaphthylene	40.0	31.28		ug/L		78	41 - 130	14	20
Anthracene	40.0	37.12		ug/L		93	48 - 130	10	20
Benzo[a]anthracene	40.0	42.90		ug/L		107	47 - 130	3	20
Benzo[b]fluoranthene	40.0	48.05		ug/L		120	47 - 130	1	20
Benzo[k]fluoranthene	40.0	49.28		ug/L		123	44 - 131	3	20
Benzo[g,h,i]perylene	40.0	45.80		ug/L		115	42 - 138	3	20
Benzo[a]pyrene	40.0	45.58		ug/L		114	52 - 130	1	20
Bis(2-chloroethoxy)methane	40.0	37.95	*	ug/L		95	42 - 130	21	20
Bis(2-chloroethyl)ether	40.0	35.74	*	ug/L		89	35 - 130	25	20
Bis(2-ethylhexyl) phthalate	40.0	60.51	*	ug/L		151	34 - 139	1	20
4-Bromophenyl phenyl ether	40.0	33.06		ug/L		83	44 - 130	16	20
Butyl benzyl phthalate	40.0	58.14		ug/L		145	22 - 150	2	20
4-Chloroaniline	40.0	26.81	*	ug/L		67	19 - 130	55	20
2-Chloronaphthalene	40.0	30.91		ug/L		77	39 - 130	17	20
4-Chlorophenyl phenyl ether	40.0	32.64		ug/L		82	37 - 130	16	20
Carbazole	40.0	39.69		ug/L		99	49 - 130	7	20
Chrysene	40.0	44.36		ug/L		111	46 - 130	2	20
Di-n-butyl phthalate	40.0	48.03		ug/L		120	50 - 130	0	20
Dibenz(a,h)anthracene	40.0	44.54		ug/L		111	46 - 132	3	20
Dibenzofuran	40.0	32.69		ug/L		82	42 - 130	11	20
3,3'-Dichlorobenzidine	40.0	33.24		ug/L		83	10 - 150	29	40
Diethyl phthalate	40.0	37.69		ug/L		94	42 - 130	4	20
Dimethyl phthalate	40.0	33.17		ug/L		83	43 - 130	11	20
2,4-Dinitrotoluene	40.0	36.71		ug/L		92	48 - 130	7	20
2,6-Dinitrotoluene	40.0	32.32		ug/L		81	43 - 130	13	20
Di-n-octyl phthalate	40.0	57.82	*	ug/L		145	40 - 132	2	20

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCSD 600-279425/3-A
Matrix: Water
Analysis Batch: 279568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 279425

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoranthene			40.0	37.61		ug/L		94	52 - 130	4	20
Fluorene			40.0	34.58		ug/L		86	39 - 130	13	20
Hexachlorobenzene			40.0	31.16		ug/L		78	45 - 130	14	20
Hexachlorocyclopentadiene			40.0	18.86	*	ug/L		47	14 - 130	46	20
Hexachloroethane			40.0	34.78	*	ug/L		87	37 - 130	27	20
Hexachlorobutadiene			40.0	24.83	*	ug/L		62	35 - 130	28	20
Indeno[1,2,3-cd]pyrene			40.0	46.61	*	ug/L		117	38 - 132	25	20
Isophorone			40.0	35.76		ug/L		89	39 - 130	18	20
2-Methylnaphthalene			40.0	41.37	*	ug/L		103	40 - 130	22	20
Naphthalene			40.0	30.09	*	ug/L		75	41 - 130	22	20
2-Nitroaniline			40.0	44.72	J	ug/L		112	39 - 130	9	20
3-Nitroaniline			40.0	34.63	J	ug/L		87	33 - 130	6	20
4-Nitroaniline			40.0	35.12		ug/L		88	37 - 130	7	20
Nitrobenzene			40.0	47.36	*	ug/L		118	44 - 130	22	20
N-Nitrosodiphenylamine			40.0	37.28		ug/L		93	30 - 134	10	20
N-Nitrosodi-n-propylamine			40.0	40.13		ug/L		100	37 - 130	20	20
Phenanthrene			40.0	36.61		ug/L		92	47 - 130	14	20
Pyrene			40.0	42.88		ug/L		107	41 - 130	7	40
4-Chloro-3-methylphenol			40.0	34.41	*	ug/L		86	43 - 130	21	20
2-Chlorophenol			40.0	31.63	*	ug/L		79	36 - 130	26	20
2-Methylphenol			40.0	34.32	*	ug/L		86	37 - 130	22	20
3 & 4 Methylphenol			40.0	33.83	*	ug/L		85	39 - 130	27	20
2,4-Dichlorophenol			40.0	28.08	*	ug/L		70	41 - 130	27	20
2,4-Dimethylphenol			40.0	26.48	*	ug/L		66	32 - 130	40	20
4,6-Dinitro-2-methylphenol			80.0	85.77		ug/L		107	49 - 130	11	20
2,4-Dinitrophenol			80.0	62.23		ug/L		78	34 - 130	10	20
2-Nitrophenol			40.0	32.89	*	ug/L		82	43 - 130	25	20
4-Nitrophenol			80.0	68.44	*	ug/L		86	10 - 133	43	20
Pentachlorophenol			80.0	49.12	J	ug/L		61	34 - 130	11	20
Phenol			40.0	23.08	*	ug/L		58	21 - 130	55	20
2,4,5-Trichlorophenol			40.0	27.51	*	ug/L		69	39 - 130	21	20
2,4,6-Trichlorophenol			40.0	29.21		ug/L		73	36 - 130	20	20
bis (2-Chloroisopropyl) ether			40.0	41.67	*	ug/L		104	29 - 130	23	20
1,1'-Biphenyl			40.0	32.09		ug/L		80	37 - 130	17	20
Acetophenone			40.0	34.06	*	ug/L		85	39 - 130	23	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*85*		*24 - 150*
2-Fluorophenol	*63*		*10 - 130*
2-Fluorobiphenyl	*73*		*38 - 133*
2,4,6-Tribromophenol	*61*		*19 - 150*
Terphenyl-d14	*104*		*35 - 150*
Phenol-d5 (Surr)	*66*		*10 - 130*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: MB 600-279502/1-A
Matrix: Solid
Analysis Batch: 279590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Acenaphthylene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Benzo[a]anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Benzo[b]fluoranthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Benzo[k]fluoranthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Benzo[g,h,i]perylene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Benzo[a]pyrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Bis(2-chloroethoxy)methane	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Bis(2-chloroethyl)ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Bis(2-ethylhexyl) phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Bromophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Butyl benzyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Chloroaniline	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2-Chloronaphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Chlorophenyl phenyl ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Carbazole	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Chrysene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Di-n-butyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Dibenz(a,h)anthracene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Dibenzofuran	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
3,3'-Dichlorobenzidine	ND		656		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Diethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Dimethyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4-Dinitrotoluene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,6-Dinitrotoluene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Di-n-octyl phthalate	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Fluoranthene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Fluorene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Hexachlorobenzene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Hexachlorocyclopentadiene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Hexachloroethane	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Hexachlorobutadiene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Indeno[1,2,3-cd]pyrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Isophorone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2-Methylnaphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Naphthalene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
3-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Nitroaniline	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Nitrobenzene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
N-Nitrosodiphenylamine	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
N-Nitrosodi-n-propylamine	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Phenanthrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Pyrene	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Chloro-3-methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2-Chlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: MB 600-279502/1-A
Matrix: Solid
Analysis Batch: 279590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
3 & 4 Methylphenol	ND		656		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4-Dichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4-Dimethylphenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2-Nitrophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
4-Nitrophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Pentachlorophenol	ND		1590		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Phenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4,5-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
2,4,6-Trichlorophenol	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
bis (2-Chloroisopropyl) ether	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
1,1'-Biphenyl	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1
Acetophenone	ND		328		ug/Kg		11/05/19 15:29	11/06/19 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*49*		*10 - 150*	*11/05/19 15:29*	*11/06/19 15:34*	*1*
2-Fluorophenol	*47*		*25 - 132*	*11/05/19 15:29*	*11/06/19 15:34*	*1*
2-Fluorobiphenyl	*55*		*38 - 130*	*11/05/19 15:29*	*11/06/19 15:34*	*1*
2,4,6-Tribromophenol	*41*		*10 - 148*	*11/05/19 15:29*	*11/06/19 15:34*	*1*
Terphenyl-d14	*58*		*53 - 134*	*11/05/19 15:29*	*11/06/19 15:34*	*1*
Phenol-d5 (Surr)	*48*		*27 - 123*	*11/05/19 15:29*	*11/06/19 15:34*	*1*

Lab Sample ID: LCS 600-279502/2-A
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	3330	3041		ug/Kg		91	58 - 130
Acenaphthylene	3330	2866		ug/Kg		86	56 - 130
Anthracene	3330	4032		ug/Kg		121	58 - 130
Benzo[a]anthracene	3330	3362		ug/Kg		101	49 - 130
Benzo[b]fluoranthene	3330	3561		ug/Kg		107	58 - 130
Benzo[k]fluoranthene	3330	3485		ug/Kg		105	56 - 130
Benzo[g,h,i]perylene	3330	3656		ug/Kg		110	49 - 135
Benzo[a]pyrene	3330	3564		ug/Kg		107	58 - 130
Bis(2-chloroethoxy)methane	3330	3499		ug/Kg		105	49 - 130
Bis(2-chloroethyl)ether	3330	2427		ug/Kg		73	44 - 130
Bis(2-ethylhexyl) phthalate	3330	3539		ug/Kg		106	47 - 133
4-Bromophenyl phenyl ether	3330	3710		ug/Kg		111	56 - 130
Butyl benzyl phthalate	3330	3717		ug/Kg		112	43 - 135
4-Chloroaniline	3330	2584		ug/Kg		78	42 - 130
2-Chloronaphthalene	3330	3151		ug/Kg		95	51 - 130
4-Chlorophenyl phenyl ether	3330	2476		ug/Kg		74	57 - 130
Carbazole	3330	4423	*	ug/Kg		133	47 - 131
Chrysene	3330	3291		ug/Kg		99	50 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-279502/2-A
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	3330	3798		ug/Kg		114	54 - 130
Dibenz(a,h)anthracene	3330	3659		ug/Kg		110	48 - 130
Dibenzofuran	3330	3356		ug/Kg		101	58 - 130
3,3'-Dichlorobenzidine	3330	2768		ug/Kg		83	41 - 130
Diethyl phthalate	3330	2930		ug/Kg		88	55 - 130
Dimethyl phthalate	3330	3544		ug/Kg		106	58 - 130
2,4-Dinitrotoluene	3330	3548		ug/Kg		107	53 - 130
2,6-Dinitrotoluene	3330	3529		ug/Kg		106	53 - 130
Di-n-octyl phthalate	3330	3193		ug/Kg		96	45 - 135
Fluoranthene	3330	3194		ug/Kg		96	56 - 130
Fluorene	3330	3463		ug/Kg		104	52 - 147
Hexachlorobenzene	3330	4490	*	ug/Kg		135	59 - 130
Hexachlorocyclopentadiene	3330	1823		ug/Kg		55	33 - 130
Hexachloroethane	3330	1696		ug/Kg		51	36 - 130
Hexachlorobutadiene	3330	3089		ug/Kg		93	49 - 130
Indeno[1,2,3-cd]pyrene	3330	3777		ug/Kg		113	41 - 130
Isophorone	3330	3907		ug/Kg		117	49 - 130
2-Methylnaphthalene	3330	3297		ug/Kg		99	54 - 130
Naphthalene	3330	2577		ug/Kg		77	49 - 130
2-Nitroaniline	3330	2571		ug/Kg		77	49 - 149
3-Nitroaniline	3330	2362		ug/Kg		71	45 - 133
4-Nitroaniline	3330	2579		ug/Kg		77	48 - 139
Nitrobenzene	3330	3655		ug/Kg		110	47 - 130
N-Nitrosodiphenylamine	3330	4248		ug/Kg		128	47 - 130
N-Nitrosodi-n-propylamine	3330	2925		ug/Kg		88	43 - 130
Phenanthrene	3330	4017		ug/Kg		121	58 - 130
Pyrene	3330	3235		ug/Kg		97	48 - 131
4-Chloro-3-methylphenol	3330	2862		ug/Kg		86	54 - 130
2-Chlorophenol	3330	2013		ug/Kg		60	48 - 130
2-Methylphenol	3330	2055		ug/Kg		62	46 - 130
3 & 4 Methylphenol	3330	2103		ug/Kg		63	44 - 130
2,4-Dichlorophenol	3330	4628	*	ug/Kg		139	56 - 130
2,4-Dimethylphenol	3330	2781		ug/Kg		84	46 - 130
4,6-Dinitro-2-methylphenol	6660	6400		ug/Kg		96	45 - 130
2,4-Dinitrophenol	6660	5899		ug/Kg		89	25 - 130
2-Nitrophenol	3330	3159		ug/Kg		95	50 - 130
4-Nitrophenol	6660	3559		ug/Kg		53	20 - 132
Pentachlorophenol	6660	7701		ug/Kg		116	34 - 130
Phenol	3330	2588		ug/Kg		78	33 - 130
2,4,5-Trichlorophenol	3330	2507		ug/Kg		75	59 - 136
2,4,6-Trichlorophenol	3330	2531		ug/Kg		76	59 - 134
bis (2-Chloroisopropyl) ether	3330	1986		ug/Kg		60	39 - 130
1,1'-Biphenyl	3330	2940		ug/Kg		88	56 - 130
Acetophenone	3330	2443		ug/Kg		73	42 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*86*		*10 - 150*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-279502/2-A
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279502

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*106*		*25 - 132*
2-Fluorobiphenyl	*94*		*38 - 130*
2,4,6-Tribromophenol	*100*		*10 - 148*
Terphenyl-d14	*107*		*53 - 134*
Phenol-d5 (Surr)	*114*		*27 - 123*

Lab Sample ID: 600-195078-3 MS
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: CBPSB05010608
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		3330	2908		ug/Kg		87	58 - 130
Acenaphthylene	ND		3330	2658		ug/Kg		80	56 - 130
Anthracene	ND		3330	3254		ug/Kg		98	58 - 130
Benzo[a]anthracene	ND		3330	3023		ug/Kg		91	49 - 130
Benzo[b]fluoranthene	ND	*	3330	3310		ug/Kg		99	58 - 130
Benzo[k]fluoranthene	ND	*	3330	3207		ug/Kg		96	56 - 130
Benzo[g,h,i]perylene	ND	* F1	3330	4783	F1	ug/Kg		144	49 - 135
Benzo[a]pyrene	ND	*	3330	2896		ug/Kg		87	58 - 130
Bis(2-chloroethoxy)methane	ND	F2	3330	2692		ug/Kg		81	49 - 130
Bis(2-chloroethyl)ether	ND		3330	2340		ug/Kg		70	44 - 130
Bis(2-ethylhexyl) phthalate	ND		3330	3603		ug/Kg		108	47 - 133
4-Bromophenyl phenyl ether	ND		3330	3546		ug/Kg		107	56 - 130
Butyl benzyl phthalate	ND		3330	3694		ug/Kg		111	43 - 135
4-Chloroaniline	ND	F1	3330	ND	F1	ug/Kg		0	42 - 130
2-Chloronaphthalene	ND		3330	3112		ug/Kg		93	51 - 130
4-Chlorophenyl phenyl ether	ND		3330	2494		ug/Kg		75	57 - 130
Carbazole	ND	*	3330	2606		ug/Kg		78	47 - 131
Chrysene	ND		3330	3070		ug/Kg		92	50 - 130
Di-n-butyl phthalate	ND		3330	3304		ug/Kg		99	54 - 130
Dibenz(a,h)anthracene	ND	* F1	3330	4493	F1	ug/Kg		135	48 - 130
Dibenzofuran	ND		3330	3328		ug/Kg		100	58 - 130
3,3'-Dichlorobenzidine	ND	F1	3330	ND	F1	ug/Kg		0	41 - 130
Diethyl phthalate	ND		3330	2875		ug/Kg		86	55 - 130
Dimethyl phthalate	ND		3330	3408		ug/Kg		102	58 - 130
2,4-Dinitrotoluene	ND	F1 F2	3330	2730		ug/Kg		82	53 - 130
2,6-Dinitrotoluene	ND	F2	3330	3139		ug/Kg		94	53 - 130
Di-n-octyl phthalate	ND		3330	3230		ug/Kg		97	45 - 135
Fluoranthene	ND		3330	2730		ug/Kg		82	56 - 130
Fluorene	ND		3330	3370		ug/Kg		101	52 - 147
Hexachlorobenzene	ND	*	3330	4157		ug/Kg		125	59 - 130
Hexachlorocyclopentadiene	ND	F1	3330	ND	F1	ug/Kg		0	33 - 130
Hexachloroethane	ND	F1 F2	3330	1247		ug/Kg		37	36 - 130
Hexachlorobutadiene	ND		3330	3017		ug/Kg		91	49 - 130
Indeno[1,2,3-cd]pyrene	ND	* F1	3330	4863	F1	ug/Kg		146	41 - 130
Isophorone	ND		3330	3698		ug/Kg		111	49 - 130
2-Methylnaphthalene	ND		3330	3231		ug/Kg		97	54 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: 600-195078-3 MS
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: CBPSB05010608
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		3330	2603		ug/Kg		78	49 - 130
2-Nitroaniline	ND		3330	2404		ug/Kg		72	49 - 149
3-Nitroaniline	ND	F1	3330	ND	F1	ug/Kg		0	45 - 133
4-Nitroaniline	ND	F1	3330	ND	F1	ug/Kg		0	48 - 139
Nitrobenzene	ND		3330	3663		ug/Kg		110	47 - 130
N-Nitrosodiphenylamine	ND		3330	2299		ug/Kg		69	47 - 130
N-Nitrosodi-n-propylamine	ND	F1	3330	525.1	F1	ug/Kg		16	43 - 130
Phenanthrene	ND		3330	3926		ug/Kg		118	58 - 130
Pyrene	ND		3330	3128		ug/Kg		94	48 - 131
4-Chloro-3-methylphenol	ND		3330	2758		ug/Kg		83	54 - 130
2-Chlorophenol	ND		3330	2112		ug/Kg		63	48 - 130
2-Methylphenol	ND		3330	2008		ug/Kg		60	46 - 130
3 & 4 Methylphenol	ND		3330	2022		ug/Kg		61	44 - 130
2,4-Dichlorophenol	ND	*	3330	4276		ug/Kg		128	56 - 130
2,4-Dimethylphenol	ND	F2	3330	2243		ug/Kg		67	46 - 130
4,6-Dinitro-2-methylphenol	ND	F1 F2	6660	ND	F1	ug/Kg		7	45 - 130
2,4-Dinitrophenol	ND	F1	6660	ND	F1	ug/Kg		4	25 - 130
2-Nitrophenol	ND	F1 F2	3330	1955		ug/Kg		59	50 - 130
4-Nitrophenol	ND		6660	4667		ug/Kg		70	20 - 132
Pentachlorophenol	ND		6660	7692		ug/Kg		116	34 - 130
Phenol	ND		3330	3115		ug/Kg		94	33 - 130
2,4,5-Trichlorophenol	ND		3330	2555		ug/Kg		77	59 - 136
2,4,6-Trichlorophenol	ND		3330	2539		ug/Kg		76	59 - 134
bis (2-Chloroisopropyl) ether	ND		3330	2132		ug/Kg		64	39 - 130
1,1'-Biphenyl	ND		3330	2916		ug/Kg		88	56 - 130
Acetophenone	ND		3330	2653		ug/Kg		80	42 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*86*		*10 - 150*
2-Fluorophenol	*110*		*25 - 132*
2-Fluorobiphenyl	*93*		*38 - 130*
2,4,6-Tribromophenol	*96*		*10 - 148*
Terphenyl-d14	*102*		*53 - 134*
Phenol-d5 (Surr)	*113*		*27 - 123*

Lab Sample ID: 600-195078-3 MSD
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: CBPSB05010608
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		3310	2735		ug/Kg		83	58 - 130	6	30
Acenaphthylene	ND		3310	2430		ug/Kg		73	56 - 130	9	30
Anthracene	ND		3310	3019		ug/Kg		91	58 - 130	7	30
Benzo[a]anthracene	ND		3310	2892		ug/Kg		87	49 - 130	4	30
Benzo[b]fluoranthene	ND	*	3310	3031		ug/Kg		91	58 - 130	9	30
Benzo[k]fluoranthene	ND	*	3310	2852		ug/Kg		86	56 - 130	12	30
Benzo[g,h,i]perylene	ND	* F1	3310	5207	F1	ug/Kg		157	49 - 135	8	30

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: 600-195078-3 MSD
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: CBPSB05010608
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	ND	*	3310	2512		ug/Kg		76	58 - 130	14	30
Bis(2-chloroethoxy)methane	ND	F2	3310	1879	F2	ug/Kg		57	49 - 130	36	30
Bis(2-chloroethyl)ether	ND		3310	2086		ug/Kg		63	44 - 130	12	30
Bis(2-ethylhexyl) phthalate	ND		3310	3537		ug/Kg		107	47 - 133	2	30
4-Bromophenyl phenyl ether	ND		3310	3530		ug/Kg		107	56 - 130	0	30
Butyl benzyl phthalate	ND		3310	3501		ug/Kg		106	43 - 135	5	30
4-Chloroaniline	ND	F1	3310	ND	F1	ug/Kg		0	42 - 130	NC	30
2-Chloronaphthalene	ND		3310	2949		ug/Kg		89	51 - 130	5	30
4-Chlorophenyl phenyl ether	ND		3310	2368		ug/Kg		71	57 - 130	5	30
Carbazole	ND	*	3310	2759		ug/Kg		83	47 - 131	6	30
Chrysene	ND		3310	3095		ug/Kg		93	50 - 130	1	30
Di-n-butyl phthalate	ND		3310	3390		ug/Kg		102	54 - 130	3	30
Dibenz(a,h)anthracene	ND	* F1	3310	4914	F1	ug/Kg		148	48 - 130	9	30
Dibenzofuran	ND		3310	3222		ug/Kg		97	58 - 130	3	30
3,3'-Dichlorobenzidine	ND	F1	3310	ND	F1	ug/Kg		0	41 - 130	NC	30
Diethyl phthalate	ND		3310	2566		ug/Kg		77	55 - 130	11	30
Dimethyl phthalate	ND		3310	2976		ug/Kg		90	58 - 130	14	30
2,4-Dinitrotoluene	ND	F1 F2	3310	1699	F2 F1	ug/Kg		51	53 - 130	47	30
2,6-Dinitrotoluene	ND	F2	3310	1914	F2	ug/Kg		58	53 - 130	48	30
Di-n-octyl phthalate	ND		3310	3142		ug/Kg		95	45 - 135	3	30
Fluoranthene	ND		3310	2870		ug/Kg		87	56 - 130	5	30
Fluorene	ND		3310	3305		ug/Kg		100	52 - 147	2	30
Hexachlorobenzene	ND	*	3310	4233		ug/Kg		128	59 - 130	2	30
Hexachlorocyclopentadiene	ND	F1	3310	ND	F1	ug/Kg		0	33 - 130	NC	30
Hexachloroethane	ND	F1 F2	3310	769.9	F2 F1	ug/Kg		23	36 - 130	47	30
Hexachlorobutadiene	ND		3310	2693		ug/Kg		81	49 - 130	11	30
Indeno[1,2,3-cd]pyrene	ND	* F1	3310	5980	F1	ug/Kg		180	41 - 130	21	30
Isophorone	ND		3310	3300		ug/Kg		100	49 - 130	11	30
2-Methylnaphthalene	ND		3310	2957		ug/Kg		89	54 - 130	9	30
Naphthalene	ND		3310	2296		ug/Kg		69	49 - 130	13	30
2-Nitroaniline	ND		3310	2186		ug/Kg		66	49 - 149	9	30
3-Nitroaniline	ND	F1	3310	ND	F1	ug/Kg		0	45 - 133	NC	30
4-Nitroaniline	ND	F1	3310	ND	F1	ug/Kg		0	48 - 139	NC	30
Nitrobenzene	ND		3310	2900		ug/Kg		88	47 - 130	23	30
N-Nitrosodiphenylamine	ND		3310	1865		ug/Kg		56	47 - 130	21	30
N-Nitrosodi-n-propylamine	ND	F1	3310	ND	F1	ug/Kg		0	43 - 130	NC	30
Phenanthrene	ND		3310	4045		ug/Kg		122	58 - 130	3	30
Pyrene	ND		3310	2985		ug/Kg		90	48 - 131	5	30
4-Chloro-3-methylphenol	ND		3310	2577		ug/Kg		78	54 - 130	7	30
2-Chlorophenol	ND		3310	1918		ug/Kg		58	48 - 130	10	30
2-Methylphenol	ND		3310	1756		ug/Kg		53	46 - 130	13	30
3 & 4 Methylphenol	ND		3310	1903		ug/Kg		57	44 - 130	6	30
2,4-Dichlorophenol	ND	*	3310	3924		ug/Kg		118	56 - 130	9	30
2,4-Dimethylphenol	ND	F2	3310	1551	F2	ug/Kg		47	46 - 130	36	30
4,6-Dinitro-2-methylphenol	ND	F1 F2	6630	ND	F2 F1	ug/Kg		3	45 - 130	75	30
2,4-Dinitrophenol	ND	F1	6630	ND	F1	ug/Kg		0	25 - 130	NC	30
2-Nitrophenol	ND	F1 F2	3310	944.7	F2 F1	ug/Kg		29	50 - 130	70	30

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: 600-195078-3 MSD
Matrix: Solid
Analysis Batch: 279686

Client Sample ID: CBPSB05010608
Prep Type: Total/NA
Prep Batch: 279502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol	ND		6630	3793		ug/Kg		57	20 - 132	21	30
Pentachlorophenol	ND		6630	7850		ug/Kg		118	34 - 130	2	30
Phenol	ND		3310	3233		ug/Kg		98	33 - 130	4	30
2,4,5-Trichlorophenol	ND		3310	2568		ug/Kg		78	59 - 136	1	30
2,4,6-Trichlorophenol	ND		3310	2489		ug/Kg		75	59 - 134	2	30
bis (2-Chloroisopropyl) ether	ND		3310	1976		ug/Kg		60	39 - 130	8	30
1,1'-Biphenyl	ND		3310	2820		ug/Kg		85	56 - 130	3	30
Acetophenone	ND		3310	2344		ug/Kg		71	42 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*10 - 150*
2-Fluorophenol	*106*		*25 - 132*
2-Fluorobiphenyl	*90*		*38 - 130*
2,4,6-Tribromophenol	*90*		*10 - 148*
Terphenyl-d14	*101*		*53 - 134*
Phenol-d5 (Surr)	*109*		*27 - 123*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-280198/1-A
Matrix: Solid
Analysis Batch: 280608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		25.0		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Arsenic	ND		1.00		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Barium	ND		1.00		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Beryllium	ND		0.250		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Calcium	ND		100		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Cadmium	ND		0.250		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Cobalt	ND		0.500		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Chromium	ND		0.500		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Copper	ND		0.500		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Iron	ND		20.0		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Potassium	ND		100		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Magnesium	ND		100		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Manganese	ND		1.50		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Sodium	ND		100		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Nickel	ND		1.00		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Lead	ND		0.500		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Antimony	ND		2.50		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Selenium	ND		2.00		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Vanadium	ND		0.500		mg/Kg		11/12/19 21:52	11/18/19 15:43	1
Zinc	ND		1.50		mg/Kg		11/12/19 21:52	11/18/19 15:43	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-280198/1-A
Matrix: Solid
Analysis Batch: 280693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.400		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Aluminum	ND		25.0		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Arsenic	ND		1.00		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Barium	ND		1.00		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Beryllium	ND		0.250		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Calcium	ND		100		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Cadmium	ND		0.250		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Cobalt	ND		0.500		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Chromium	ND		0.500		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Copper	ND		0.500		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Iron	ND		20.0		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Potassium	ND		100		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Magnesium	ND		100		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Manganese	ND		1.50		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Sodium	ND		100		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Nickel	ND		1.00		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Lead	ND		0.500		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Antimony	ND		2.50		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Selenium	ND		2.00		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Thallium	ND		1.50		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Vanadium	ND		0.500		mg/Kg		11/12/19 21:52	11/19/19 09:57	1
Zinc	ND		1.50		mg/Kg		11/12/19 21:52	11/19/19 09:57	1

Lab Sample ID: LCSSRM 600-280198/2-A
Matrix: Solid
Analysis Batch: 280608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280198

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13700	9071		mg/Kg		66.2	35.7 - 110.2
Arsenic	319	285.5		mg/Kg		89.5	60.2 - 111.6
Barium	299	229.5		mg/Kg		76.8	59.2 - 110.0
Beryllium	190	156.3		mg/Kg		82.3	64.2 - 110.0
Calcium	16000	13800		mg/Kg		86.3	61.8 - 110.0
Cadmium	182	152.2		mg/Kg		83.6	65.4 - 109.9
Cobalt	280	248.7		mg/Kg		88.8	63.2 - 110.0
Chromium	189	147.5		mg/Kg		78.0	59.8 - 110.6
Copper	107	84.29		mg/Kg		78.8	61.6 - 110.3
Iron	18600	13370		mg/Kg		71.9	24.7 - 121.5
Potassium	11600	10140		mg/Kg		87.4	59.0 - 110.3
Magnesium	13600	11350		mg/Kg		83.5	62.5 - 110.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-280198/2-A
Matrix: Solid
Analysis Batch: 280608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280198

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1390	931.8		mg/Kg		67.0	66.1 - 110.1
Sodium	14200	11290		mg/Kg		79.5	58.7 - 113.4
Nickel	117	106.9		mg/Kg		91.4	59.6 - 110.3
Lead	148	135.1		mg/Kg		91.3	61.0 - 110.1
Antimony	118	26.01		mg/Kg		22.0	10.0 - 110.2
Selenium	322	272.5		mg/Kg		84.6	57.8 - 109.9
Vanadium	40.1	23.05		mg/Kg		57.5	20.0 - 115.2
Zinc	498	436.4		mg/Kg		87.6	58.8 - 110.0

Lab Sample ID: LCSSRM 600-280198/2-A
Matrix: Solid
Analysis Batch: 280693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280198

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	34.8	28.29		mg/Kg		81.3	58.3 - 112.9
Aluminum	13700	9435		mg/Kg		68.9	35.7 - 110.2
Arsenic	319	277.4		mg/Kg		87.0	60.2 - 111.6
Barium	299	228.1		mg/Kg		76.3	59.2 - 110.0
Beryllium	190	164.0		mg/Kg		86.3	64.2 - 110.0
Calcium	16000	13630		mg/Kg		85.2	61.8 - 110.0
Cadmium	182	149.5		mg/Kg		82.1	65.4 - 109.9
Cobalt	280	253.1		mg/Kg		90.4	63.2 - 110.0
Chromium	189	153.9		mg/Kg		81.4	59.8 - 110.6
Copper	107	88.72		mg/Kg		82.9	61.6 - 110.3
Iron	18600	13400		mg/Kg		72.0	24.7 - 121.5
Potassium	11600	9525		mg/Kg		82.1	59.0 - 110.3
Magnesium	13600	11180		mg/Kg		82.2	62.5 - 110.3
Manganese	1390	1069		mg/Kg		76.9	66.1 - 110.1
Sodium	14200	11420		mg/Kg		80.4	58.7 - 113.4
Nickel	117	107.7		mg/Kg		92.1	59.6 - 110.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-280198/2-A
Matrix: Solid
Analysis Batch: 280693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280198

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	148	133.1		mg/Kg		89.9	61.0 - 110.1
Antimony	118	26.93		mg/Kg		22.8	10.0 - 110.2
Selenium	322	271.2		mg/Kg		84.2	57.8 - 109.9
Thallium	253	202.8		mg/Kg		80.2	59.7 - 109.9
Vanadium	40.1	24.74		mg/Kg		61.7	20.0 - 115.2
Zinc	498	460.5		mg/Kg		92.5	58.8 - 110.0

Lab Sample ID: MB 600-280267/1-A
Matrix: Water
Analysis Batch: 280475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND	^	0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Aluminum	ND		0.500		mg/L		11/13/19 13:31	11/15/19 10:25	1
Arsenic	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Barium	ND		0.0200		mg/L		11/13/19 13:31	11/15/19 10:25	1
Beryllium	ND		0.00500		mg/L		11/13/19 13:31	11/15/19 10:25	1
Calcium	ND		1.00		mg/L		11/13/19 13:31	11/15/19 10:25	1
Cadmium	ND		0.00500		mg/L		11/13/19 13:31	11/15/19 10:25	1
Cobalt	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Chromium	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Copper	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Iron	ND		0.400		mg/L		11/13/19 13:31	11/15/19 10:25	1
Potassium	ND		1.00		mg/L		11/13/19 13:31	11/15/19 10:25	1
Magnesium	ND		1.00		mg/L		11/13/19 13:31	11/15/19 10:25	1
Manganese	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Sodium	ND		1.00		mg/L		11/13/19 13:31	11/15/19 10:25	1
Nickel	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Lead	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Antimony	ND		0.0500		mg/L		11/13/19 13:31	11/15/19 10:25	1
Selenium	ND		0.0400		mg/L		11/13/19 13:31	11/15/19 10:25	1
Thallium	ND	^	0.0300		mg/L		11/13/19 13:31	11/15/19 10:25	1
Vanadium	ND		0.0100		mg/L		11/13/19 13:31	11/15/19 10:25	1
Zinc	ND		0.0300		mg/L		11/13/19 13:31	11/15/19 10:25	1

Lab Sample ID: LCS 600-280267/2-A
Matrix: Water
Analysis Batch: 280475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280267

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2937	^	mg/L		117	80 - 120
Aluminum	10.0	10.14		mg/L		101	80 - 120
Arsenic	1.00	1.010		mg/L		101	80 - 120
Barium	1.00	1.017		mg/L		102	80 - 120
Beryllium	1.00	1.024		mg/L		102	80 - 120

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-280267/2-A
Matrix: Water
Analysis Batch: 280475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280267

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	10.13		mg/L		101	80 - 120
Cadmium	1.00	1.012		mg/L		101	80 - 120
Cobalt	1.00	0.9881		mg/L		99	80 - 120
Chromium	1.00	0.9982		mg/L		100	80 - 120
Copper	1.00	0.9958		mg/L		100	80 - 120
Iron	10.0	10.21		mg/L		102	80 - 120
Potassium	10.0	10.27		mg/L		103	80 - 120
Magnesium	10.0	10.34		mg/L		103	80 - 120
Manganese	1.00	1.024		mg/L		102	80 - 120
Sodium	10.0	10.39		mg/L		104	80 - 120
Nickel	1.00	1.008		mg/L		101	80 - 120
Lead	1.00	1.005		mg/L		101	80 - 120
Antimony	1.50	1.636		mg/L		109	80 - 120
Selenium	1.00	0.9958		mg/L		100	80 - 120
Thallium	1.00	1.005	^	mg/L		101	80 - 120
Vanadium	1.00	1.010		mg/L		101	80 - 120
Zinc	0.500	0.5048		mg/L		101	80 - 120

Lab Sample ID: MB 600-281421/1-A
Matrix: Water
Analysis Batch: 281654

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 281421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Aluminum	ND		0.500		mg/L		11/26/19 13:45	11/29/19 12:00	1
Arsenic	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Barium	ND		0.0200		mg/L		11/26/19 13:45	11/29/19 12:00	1
Beryllium	ND		0.00500		mg/L		11/26/19 13:45	11/29/19 12:00	1
Calcium	ND		1.00		mg/L		11/26/19 13:45	11/29/19 12:00	1
Cadmium	ND		0.00500		mg/L		11/26/19 13:45	11/29/19 12:00	1
Cobalt	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Chromium	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Copper	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Iron	ND		0.400		mg/L		11/26/19 13:45	11/29/19 12:00	1
Potassium	ND		1.00		mg/L		11/26/19 13:45	11/29/19 12:00	1
Magnesium	ND		1.00		mg/L		11/26/19 13:45	11/29/19 12:00	1
Manganese	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Sodium	ND		1.00		mg/L		11/26/19 13:45	11/29/19 12:00	1
Nickel	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Lead	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Antimony	ND	^	0.0500		mg/L		11/26/19 13:45	11/29/19 12:00	1
Selenium	ND		0.0400		mg/L		11/26/19 13:45	11/29/19 12:00	1
Thallium	ND	^	0.0300		mg/L		11/26/19 13:45	11/29/19 12:00	1
Vanadium	ND		0.0100		mg/L		11/26/19 13:45	11/29/19 12:00	1
Zinc	ND		0.0300		mg/L		11/26/19 13:45	11/29/19 12:00	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-281421/2-A
Matrix: Water
Analysis Batch: 281654

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 281421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2445		mg/L		98	80 - 120
Aluminum	10.0	9.884		mg/L		99	80 - 120
Arsenic	1.00	1.051		mg/L		105	80 - 120
Barium	1.00	1.005		mg/L		101	80 - 120
Beryllium	1.00	1.049		mg/L		105	80 - 120
Calcium	10.0	10.32		mg/L		103	80 - 120
Cadmium	1.00	1.076		mg/L		108	80 - 120
Cobalt	1.00	1.006		mg/L		101	80 - 120
Chromium	1.00	1.100		mg/L		110	80 - 120
Copper	1.00	1.080		mg/L		108	80 - 120
Iron	10.0	10.12		mg/L		101	80 - 120
Potassium	10.0	10.60		mg/L		106	80 - 120
Magnesium	10.0	10.46		mg/L		105	80 - 120
Manganese	1.00	1.038		mg/L		104	80 - 120
Sodium	10.0	10.71		mg/L		107	80 - 120
Nickel	1.00	0.9970		mg/L		100	80 - 120
Lead	1.00	1.017		mg/L		102	80 - 120
Antimony	1.50	1.509	^	mg/L		101	80 - 120
Selenium	1.00	1.074		mg/L		107	80 - 120
Thallium	1.00	1.107	^	mg/L		111	80 - 120
Vanadium	1.00	1.067		mg/L		107	80 - 120
Zinc	0.500	0.5235		mg/L		105	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-279715/1-L
Matrix: Water
Analysis Batch: 280763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280560

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		11/18/19 09:37	11/19/19 10:59	1

Lab Sample ID: LB 600-280339/1-F
Matrix: Water
Analysis Batch: 280763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280560

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		11/18/19 09:37	11/19/19 11:11	1

Lab Sample ID: MB 600-280560/7-B
Matrix: Water
Analysis Batch: 280763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		11/18/19 09:37	11/19/19 10:03	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-280560/8-B
Matrix: Water
Analysis Batch: 280763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.75	3.739		ug/L		100	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-280876/7-A
Matrix: Solid
Analysis Batch: 281152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		15.7		ug/Kg		11/20/19 13:00	11/22/19 17:17	1

Lab Sample ID: LCS 600-280876/8-B
Matrix: Solid
Analysis Batch: 281152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	227	229.4		ug/Kg		101	70 - 130

QC Association Summary

Client: HDR Inc
Project/Site: City BLock Parcel - Paducah KY

Job ID: 600-195078-1
SDG: Paducah Downtown Development Project

GC/MS VOA

Analysis Batch: 279301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	8260B	
MB 600-279301/7	Method Blank	Total/NA	Water	8260B	
LCS 600-279301/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-279301/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 279826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	8260B	279859
600-195078-2	CBPSB04012830	Total/NA	Solid	8260B	279881
600-195078-3	CBPSB05010608	Total/NA	Solid	8260B	279881
600-195078-4	CBPSB05012225	Total/NA	Solid	8260B	279881
MB 600-279826/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-279826/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-279826/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 279859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	5030B	

Prep Batch: 279881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-2	CBPSB04012830	Total/NA	Solid	5030B	
600-195078-3	CBPSB05010608	Total/NA	Solid	5030B	
600-195078-4	CBPSB05012225	Total/NA	Solid	5030B	

GC/MS Semi VOA

Leach Batch: 279309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-279309/1-C	Method Blank	Total/NA	Water	1312	

Prep Batch: 279425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	3510C LVI	
LB 600-279309/1-C	Method Blank	Total/NA	Water	3510C LVI	279309
MB 600-279425/1-A	Method Blank	Total/NA	Water	3510C LVI	
LCS 600-279425/2-A	Lab Control Sample	Total/NA	Water	3510C LVI	
LCSD 600-279425/3-A	Lab Control Sample Dup	Total/NA	Water	3510C LVI	

Analysis Batch: 279485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	8270C	279425
LB 600-279309/1-C	Method Blank	Total/NA	Water	8270C	279425
MB 600-279425/1-A	Method Blank	Total/NA	Water	8270C	279425

Prep Batch: 279502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	3546	
600-195078-2	CBPSB04012830	Total/NA	Solid	3546	
600-195078-3	CBPSB05010608	Total/NA	Solid	3546	
600-195078-4	CBPSB05012225	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 279502 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-279502/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-279502/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-195078-3 MS	CBPSB05010608	Total/NA	Solid	3546	
600-195078-3 MSD	CBPSB05010608	Total/NA	Solid	3546	

Analysis Batch: 279568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-279425/2-A	Lab Control Sample	Total/NA	Water	8270C	279425
LCSD 600-279425/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	279425

Analysis Batch: 279590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	8270C	279502
600-195078-2	CBPSB04012830	Total/NA	Solid	8270C	279502
600-195078-3	CBPSB05010608	Total/NA	Solid	8270C	279502
600-195078-4	CBPSB05012225	Total/NA	Solid	8270C	279502
MB 600-279502/1-A	Method Blank	Total/NA	Solid	8270C	279502

Analysis Batch: 279686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-279502/2-A	Lab Control Sample	Total/NA	Solid	8270C	279502
600-195078-3 MS	CBPSB05010608	Total/NA	Solid	8270C	279502
600-195078-3 MSD	CBPSB05010608	Total/NA	Solid	8270C	279502

Metals

Leach Batch: 279715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-279715/1-L	Method Blank	Total/NA	Water	1311	

Prep Batch: 280198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	3050B	
600-195078-3	CBPSB05010608	Total/NA	Solid	3050B	
MB 600-280198/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-280198/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 280267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	3010A	
MB 600-280267/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-280267/2-A	Lab Control Sample	Total/NA	Water	3010A	

Leach Batch: 280339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-280339/1-F	Method Blank	Total/NA	Water	1311	

Analysis Batch: 280475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-280267/1-A	Method Blank	Total/NA	Water	6010B	280267
LCS 600-280267/2-A	Lab Control Sample	Total/NA	Water	6010B	280267

Metals

Analysis Batch: 280499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	6010B	280267

Prep Batch: 280560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	7470A	
600-195078-6	CBPSB0501GW	Dissolved	Water	7470A	
LB 600-279715/1-L	Method Blank	Total/NA	Water	7470A	279715
LB 600-280339/1-F	Method Blank	Total/NA	Water	7470A	280339
MB 600-280560/7-B	Method Blank	Total/NA	Water	7470A	
LCS 600-280560/8-B	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 280608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	6010B	280198
600-195078-3	CBPSB05010608	Total/NA	Solid	6010B	280198
MB 600-280198/1-A	Method Blank	Total/NA	Solid	6010B	280198
LCSSRM 600-280198/2-A	Lab Control Sample	Total/NA	Solid	6010B	280198

Analysis Batch: 280693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	6010B	280198
600-195078-3	CBPSB05010608	Total/NA	Solid	6010B	280198
MB 600-280198/1-A	Method Blank	Total/NA	Solid	6010B	280198
LCSSRM 600-280198/2-A	Lab Control Sample	Total/NA	Solid	6010B	280198

Analysis Batch: 280763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-5	CBPSB0501GW	Total/NA	Water	7470A	280560
600-195078-6	CBPSB0501GW	Dissolved	Water	7470A	280560
LB 600-279715/1-L	Method Blank	Total/NA	Water	7470A	280560
LB 600-280339/1-F	Method Blank	Total/NA	Water	7470A	280560
MB 600-280560/7-B	Method Blank	Total/NA	Water	7470A	280560
LCS 600-280560/8-B	Lab Control Sample	Total/NA	Water	7470A	280560

Prep Batch: 280876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	7471A	
600-195078-3	CBPSB05010608	Total/NA	Solid	7471A	
MB 600-280876/7-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-280876/8-B	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 281152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	7471A	280876
600-195078-3	CBPSB05010608	Total/NA	Solid	7471A	280876
MB 600-280876/7-A	Method Blank	Total/NA	Solid	7471A	280876
LCS 600-280876/8-B	Lab Control Sample	Total/NA	Solid	7471A	280876

Prep Batch: 281421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-6	CBPSB0501GW	Dissolved	Water	3005A	

QC Association Summary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paducah Downtown Development Project

Metals (Continued)

Prep Batch: 281421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-281421/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 600-281421/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 281654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-6	CBPSB0501GW	Dissolved	Water	6010B	281421
MB 600-281421/1-A	Method Blank	Total Recoverable	Water	6010B	281421
LCS 600-281421/2-A	Lab Control Sample	Total Recoverable	Water	6010B	281421

General Chemistry

Analysis Batch: 279422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195078-1	CBPSB04010406	Total/NA	Solid	2540B	
600-195078-3	CBPSB05010608	Total/NA	Solid	2540B	

Lab Chronicle

Client: HDR Inc
Project/Site: City BLock Parcel - Paducah KY

Job ID: 600-195078-1
SDG: Paduckah Downtown Development Project

Client Sample ID: CBPSB04010406

Date Collected: 10/28/19 13:45
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			1.31 g	5 mL	279859	11/08/19 11:49	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	279826	11/08/19 15:16	WS1	TAL HOU
Total/NA	Prep	3546			15.08 g	1.0 mL	279502	11/05/19 15:29	SMB	TAL HOU
Total/NA	Analysis	8270C		1			279590	11/06/19 16:44	RP	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	280198	11/12/19 21:52	CLD	TAL HOU
Total/NA	Analysis	6010B		1			280608	11/18/19 16:26	KP1	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	280198	11/12/19 21:52	CLD	TAL HOU
Total/NA	Analysis	6010B		1			280693	11/19/19 10:43	KP1	TAL HOU
Total/NA	Prep	7471A			0.66 g	50 mL	280876	11/20/19 13:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1			281152	11/22/19 16:25	SOT	TAL HOU
Total/NA	Analysis	2540B		1			279422	11/05/19 08:31	AP	TAL HOU

Client Sample ID: CBPSB04012830

Date Collected: 10/28/19 14:48
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.79 g	5 mL	279881	11/08/19 13:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	279826	11/08/19 19:41	WS1	TAL HOU
Total/NA	Prep	3546			15.06 g	1.0 mL	279502	11/05/19 15:29	SMB	TAL HOU
Total/NA	Analysis	8270C		1			279590	11/06/19 17:11	RP	TAL HOU

Client Sample ID: CBPSB05010608

Date Collected: 10/29/19 15:05
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.85 g	5 mL	279881	11/08/19 13:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	279826	11/08/19 20:03	WS1	TAL HOU
Total/NA	Prep	3546			15.09 g	1.0 mL	279502	11/05/19 15:29	SMB	TAL HOU
Total/NA	Analysis	8270C		1			279590	11/06/19 17:34	RP	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	280198	11/12/19 21:52	CLD	TAL HOU
Total/NA	Analysis	6010B		1			280608	11/18/19 16:38	KP1	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	280198	11/12/19 21:52	CLD	TAL HOU
Total/NA	Analysis	6010B		1			280693	11/19/19 10:45	KP1	TAL HOU
Total/NA	Prep	7471A			0.71 g	50 mL	280876	11/20/19 13:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1			281152	11/22/19 16:27	SOT	TAL HOU
Total/NA	Analysis	2540B		1			279422	11/05/19 08:31	AP	TAL HOU

Lab Chronicle

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

Client Sample ID: CBPSB05012225
Date Collected: 10/29/19 15:50
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.36 g	5 mL	279881	11/08/19 13:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	279826	11/08/19 16:00	WS1	TAL HOU
Total/NA	Prep	3546			15.02 g	1.0 mL	279502	11/05/19 15:29	SMB	TAL HOU
Total/NA	Analysis	8270C		1			279590	11/06/19 18:44	RP	TAL HOU

Client Sample ID: CBPSB0501GW
Date Collected: 10/30/19 07:30
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-5
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	8260B		1	5 mL	5 mL	279301	11/04/19 15:23	DT1	TAL HOU
Total/NA	Prep	3510C LVI			250 mL	1.0 mL	279425	11/05/19 09:03	LER	TAL HOU
Total/NA	Analysis	8270C		1			279485	11/06/19 00:18	RP	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	280267	11/13/19 13:31	P1D	TAL HOU
Total/NA	Analysis	6010B		1			280499	11/15/19 19:24	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	280560	11/18/19 09:37	SOT	TAL HOU
Total/NA	Analysis	7470A		1			280763	11/19/19 11:30	SOT	TAL HOU

Client Sample ID: CBPSB0501GW
Date Collected: 10/30/19 07:30
Date Received: 11/01/19 10:18

Lab Sample ID: 600-195078-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	281421	11/26/19 13:45	P1D	TAL HOU
Dissolved	Analysis	6010B		1			281654	11/29/19 12:48	TWR	TAL HOU
Dissolved	Prep	7470A			40 mL	50 mL	280560	11/18/19 09:37	SOT	TAL HOU
Dissolved	Analysis	7470A		1			280763	11/19/19 11:32	SOT	TAL HOU

Laboratory References:
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 600-195078-1
Project/Site: City BLock Parcel - Paducah KY
SDG: Paduckah Downtown Development Project

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-20
Oklahoma	State	2019-073	09-01-20
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Bret Watkins	Lab PM: Hayes, Ken	Carrier Tracking No(s):	COC No: 600-71940-19734.1
Client Contact: Bret Watkins	Phone: 270-538-1530	E-Mail: ken.hayes@testamericainc.com		Page: Page 1 of 1
Company: HDR Engineering, Inc.				Job #: 10197216

Address: 4645 Village Square Dr Suite F	Due Date Requested:
City: Paducah	TAT Requested (days):
State, Zip: KY, 42001	
Phone: 270-538-1530	PO #: Not required
Email: bret.watkins@hdrinc.com	WO #:
Project Name: Paducah Downtown Development Project	Project #: 60011607
Site: City Block Parcel - Paducah KY	SSOW#:

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270C - TCL 4.2 Default List	8260B - TCL Volatiles TX - default	6010B, 7471A	8082 - standard list	8260B - TCL Volatiles TX - default	6010B, 7470A	6010B, 7470A	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	A	N	D		
CBPSB04010406	10-28-19	1345	G	Solid	N		1	1	1					3	
CBPSB04012830	10-28-19	1448	G	Solid	N		1	1						2	
CBPSB05010608	10-29-19	1505	G	Solid	N		1	1	1					3	
CBPSB0501~~06~~DW2225	10-29-19	1550	G	Solid	N		1	1						2	
CBPSB0501GW	10-30-19	0730	G	W ~~Solid~~	N		2				3		1	6	
CBPSB0501GW	10-30-19	0730	G	W ~~Solid~~	Y								1	1	
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											

600-195078 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained lo.
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 10-31-19 / 1230	Company: HDR	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/1/19 1018	Company: TR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Eurofins TestAmerica Houston

Loc: 600
195078

eurofins | Environment Testing TestAmerica

'19NOV 1 10:18

Sample Receipt Checklist

JOB NUMBER: 078

Date/Time Received: _____

UNPACKED BY: [illegible]

CLIENT: HDR Engineering

CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO

Number of Coolers Received:

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7110	(Y) / N	Y / (N)	2.1	676	+0.1	2.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO

Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES

DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐YES ☐NO ☑NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐NO

COMMENTS:

[illegible]

HS-SA-WI-013

Rev. 4A: 08/26/2019

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-195874-1
Laboratory SDG: City Block Parcel - Paducah KY
Client Project/Site: Paducah Downtown Development Project
Revision: 1

For:
HDR Inc
4645 Village Square Dr
Suite F
Paducah, Kentucky 42001

Attn: Bret Watkins

Authorized for release by:
12/11/2019 7:44:08 PM

Ken Hayes, Project Manager II
(615)301-5035
ken.hayes@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

Table of Contents

Job ID: 600-195874-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-195874-1

REVISED REPORT: Revised to report Dissolved metals previously omitted. This report replaces the one generated on 12/03/19 @ 1744.

Comments
No additional comments.

Receipt
The samples were received on 11/15/2019 10:12 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 600-280650 recovered above the upper control limit for chloroethane(38.9%). 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 600-280650/3).

Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-280650 recovered outside control limits for the following analytes: vinyl acetate.

Method 8260B: Sample contained a lot of sediments. CBPAB1101GW (600-195874-4) and CBPAB1102GW (600-195874-5)

Method 8260B: The continuing calibration verification (CCV) associated with batch 600-280696 recovered above the upper control limit for Chloroethane (46.4%). 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 600-280696/3).

Method 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 600-280696 recovered outside control limits for the following analytes: Chloroethane. This analytes was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: CBPAB1401GW (600-195874-8). Elevated reporting limits (RLs) are provided.

Method 8260B: The method blank for analytical batch 600-281190 contained Chloroform above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC/MS Semi VOA
Method 8270C: The continuing calibration verification (CCV) associated with batch 600-280712 recovered above the upper control limit for Nitrobenzene. 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 600-280712/2).

Method 8270C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 600-280581 and analytical batch 600-280712 recovered outside control limits for the following analytes: Pentachlorophenol.

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-280732 recovered above the upper control limit for Hexachlorocyclopentadiene and Pentachlorophenol. 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 600-280732/2).

Method 8270C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 600-280581 and analytical batch 600-280712 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate and Di-n-octyl phthalate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 600-195874-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

Method 8270C: The reference method specifies a +/- 30 second retention time difference between the midpoint in the initial calibration (ICAL) and the continuing calibration verification (CCV). The CCV associated with the following sample run on instrument CHSVMS09 exceeded these criteria: (CCVIS 600-280712/2). This retention time shift is due to normal and reasonable column maintenance and does not affect the instrument chromatography resolution, sensitivity, or identification of target analytes. System retention times have been updated for proper analyte identification.

Method 8270C: Internal standard (ISTD) response for for Perylene-d12 were biased low for the following samples:(600-195495-A-1-F MS) and (600-195495-A-1-G MSD). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 600-280706 and analytical batch 600-280732 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-280801 recovered above the upper control limit for 2,4-Dichlorophenol, Hexachlorobutadiene and N-Nitrosodiphenylamine. 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 600-280801/2).

Method 8270C: The following sample was diluted due to the nature of the sample matrix: CBPAB14010206 (600-195874-6). Elevated reporting limits (RLs) are provided.

Method 8270C: The continuing calibration verification (CCV) associated with batch 600-280732 recovered above the upper control limit for 3,3'-Dichlorobenzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 600-280732/3).

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

GC Semi VOA

Method 8082: Compound ISTD eluted outside the retention time window on the RTX-CLPesticides II column for the following samples: (LCS 600-281609/2-A) and (MB 600-281609/1-A). This retention time shift was taken into account when reviewing the sample(s) for target compounds.

Method 8082: Surrogate recovery for the following sample was outside control limits: (600-195874-D-1-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Metals

Method 6010B: The post digestion spike % recovery for various analytes associated with batch 600-281288 was outside of control limits. The following sample is impacted: (600-195991-B-16-A PDS).

Method 6010B: The serial dilution performed for the following sample associated with batch 600-281288 was outside control limits for several analytes: (600-195991-B-16-A SD ^5)

Method 6010B: The post digestion spike % recovery for Manganese (62%) associated with batch 600-281409 was outside of control limits. The following sample is impacted: (600-196383-A-1-A PDS).

Method 6010B: The serial dilution performed for the following sample associated with batch 600-281409 was outside control limits for Chromium (25%), Manganese (14%) and Sodium (23%): (600-196383-A-1-A SD ^5)

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

Organic Prep

Method 3510C: Elevated reporting limits are provided for the following samples due to insufficient sample provided for preparation: CBPAB1102GW (600-195874-5) and CBPAB1401GW (600-195874-8).

Job ID: 600-195874-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

Method 3510C: sample has 30 % sediments (wet dirt).
CBPAB1101GW (600-195874-4) and CBPAB1102GW (600-195874-5)

Method 3510C: The following samples formed emulsions during the extraction procedure: CBPAB1101GW (600-195874-4) and CBPAB1102GW (600-195874-5). The emulsions were broken up using centrifuge.

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

Narrative

Job Narrative
600-195874-2

Comments
No additional comments.

Receipt
The samples were received on 11/15/2019 10:12 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

Metals
Method 6010B: The serial dilution performed for the following sample associated with batch 600-282333 was outside control limits for Potassium (15%): (600-195874-D-8-C SD ^5)

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

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

Method Summary

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL HOU
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C LVI	Liquid-Liquid Extraction (Separatory Funnel) LVI	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap for Solids	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-195874-1	CBPSB11010206	Solid	11/13/19 08:30	11/15/19 10:12	
600-195874-2	CBPSB11020206	Solid	11/13/19 08:30	11/15/19 10:12	
600-195874-3	CBPSB11012416	Solid	11/13/19 09:20	11/15/19 10:12	
600-195874-4	CBPSB1101GW	Water	11/13/19 11:30	11/15/19 10:12	
600-195874-5	CBPSB1102GW	Water	11/13/19 11:30	11/15/19 10:12	
600-195874-6	CBPSB14010206	Solid	11/13/19 12:30	11/15/19 10:12	
600-195874-7	CBPSB14012830	Solid	11/13/19 13:45	11/15/19 10:12	
600-195874-8	CBPSB1401GW	Water	11/14/19 07:30	11/15/19 10:12	

Client: HDR Inc
Project/Site: Paducah Downtown Development Project

Job ID: 600-195874-1
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB11010206
Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Benzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Bromodichloromethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Bromoform	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Bromomethane	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
2-Butanone (MEK)	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Carbon disulfide	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Carbon tetrachloride	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Chlorobenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Chlorobromomethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Chloroethane	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Chloroform	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Chloromethane	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
cis-1,2-Dichloroethene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
cis-1,3-Dichloropropene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Cyclohexane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Dibromochloromethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2-Dibromo-3-Chloropropane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2-Dibromoethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2-Dichlorobenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,3-Dichlorobenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,4-Dichlorobenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Dichlorodifluoromethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1-Dichloroethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2-Dichloroethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1-Dichloroethene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2-Dichloropropane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Ethylbenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
2-Hexanone	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Isopropylbenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Methylene Chloride	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Methyl tert-butyl ether	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
m-Xylene & p-Xylene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
o-Xylene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Styrene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1,2,2-Tetrachloroethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Tetrachloroethene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Toluene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
trans-1,2-Dichloroethene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
trans-1,3-Dichloropropene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,2,4-Trichlorobenzene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1,1-Trichloroethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1,2-Trichloroethane	ND		42.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Trichloroethene	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Vinyl acetate	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Vinyl chloride	ND		10.6		ug/Kg		11/24/19 19:36	11/24/19 20:39	1
Xylenes, Total	ND		5.32		ug/Kg		11/24/19 19:36	11/24/19 20:39	1

Client Sample ID: CBPSB11010206

Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-1

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*57 - 140*	*11/24/19 19:36*	*11/24/19 20:39*	*1*
Dibromofluoromethane	*111*		*68 - 140*	*11/24/19 19:36*	*11/24/19 20:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*11/24/19 19:36*	*11/24/19 20:39*	*1*
Toluene-d8 (Surr)	*110*		*50 - 130*	*11/24/19 19:36*	*11/24/19 20:39*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Acenaphthylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Benzo[a]anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Benzo[b]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Benzo[k]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Benzo[g,h,i]perylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Benzo[a]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Bis(2-chloroethoxy)methane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Bis(2-chloroethyl)ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Bis(2-ethylhexyl) phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Bromophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Butyl benzyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Chloroaniline	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Chloronaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Chlorophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Carbazole	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Chrysene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Di-n-butyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Dibenz(a,h)anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Dibenzofuran	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
3,3'-Dichlorobenzidine	ND		654		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Diethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Dimethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,6-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Di-n-octyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Fluorene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Hexachlorobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Hexachlorocyclopentadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Hexachloroethane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Hexachlorobutadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Indeno[1,2,3-cd]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Isophorone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Methylnaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Naphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
3-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Nitrobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
N-Nitrosodiphenylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
N-Nitrosodi-n-propylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1

Client Sample ID: CBPSB11010206

Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-1

Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Chloro-3-methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Chlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
3 & 4 Methylphenol	ND		654		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4-Dichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4-Dimethylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2-Nitrophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
4-Nitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Pentachlorophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Phenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4,5-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
2,4,6-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
bis (2-Chloroisopropyl) ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
1,1'-Biphenyl	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1
Acetophenone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*44*		*10 - 150*	*11/19/19 10:25*	*11/20/19 14:08*	*1*
2-Fluorophenol	*71*		*25 - 132*	*11/19/19 10:25*	*11/20/19 14:08*	*1*
2-Fluorobiphenyl	*70*		*38 - 130*	*11/19/19 10:25*	*11/20/19 14:08*	*1*
2,4,6-Tribromophenol	*41*		*10 - 148*	*11/19/19 10:25*	*11/20/19 14:08*	*1*
Terphenyl-d14	*69*		*53 - 134*	*11/19/19 10:25*	*11/20/19 14:08*	*1*
Phenol-d5 (Surr)	*38*		*27 - 123*	*11/19/19 10:25*	*11/20/19 14:08*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1221	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1232	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1242	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1248	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1254	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1
PCB-1260	ND	F1	16.7		ug/Kg		11/29/19 07:31	12/02/19 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*10 - 150*	*11/29/19 07:31*	*12/02/19 13:53*	*1*
DCB Decachlorobiphenyl	*112*		*10 - 150*	*11/29/19 07:31*	*12/02/19 13:53*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.381		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Aluminum	**12300**		23.8		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Arsenic	**5.48**		0.952		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Barium	**860**		0.952		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Beryllium	**1.39**		0.238		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Calcium	**1300**		95.2		mg/Kg		11/25/19 14:50	11/26/19 13:33	1

Client Sample ID: CBPSB11010206

Lab Sample ID: 600-195874-1

Date Collected: 11/13/19 08:30
Matrix: Solid
Date Received: 11/15/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.438**		0.238		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Cobalt	**13.7**		0.476		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Chromium	**12.7**		0.476		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Copper	**13.9**		0.476		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Iron	**36300**		19.0		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Potassium	**475**		95.2		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Magnesium	**2160**		95.2		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Manganese	**264**		1.43		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Sodium	**136**		95.2		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Nickel	**19.2**		0.952		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Lead	**11.6**		0.476		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Antimony	ND		2.38		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Selenium	ND		1.90		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Thallium	ND		1.43		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Vanadium	**20.9**		0.476		mg/Kg		11/25/19 14:50	11/26/19 13:33	1
Zinc	**80.0**		1.43		mg/Kg		11/25/19 14:50	11/26/19 13:33	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		16.2		ug/Kg		12/02/19 11:38	12/03/19 12:03	1

Client Sample ID: CBPSB11020206

Lab Sample ID: 600-195874-2

Date Collected: 11/13/19 08:30
Matrix: Solid
Date Received: 11/15/19 10:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**31.2**		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Benzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Bromodichloromethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Bromoform	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Bromomethane	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
2-Butanone (MEK)	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Carbon disulfide	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Carbon tetrachloride	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Chlorobenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Chlorobromomethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Chloroethane	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Chloroform	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Chloromethane	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
cis-1,2-Dichloroethene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
cis-1,3-Dichloropropene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Cyclohexane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Dibromochloromethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2-Dibromo-3-Chloropropane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2-Dibromoethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2-Dichlorobenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,3-Dichlorobenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,4-Dichlorobenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Dichlorodifluoromethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1

Client Sample ID: CBPSB11020206

Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2-Dichloroethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,1-Dichloroethene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2-Dichloropropane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Ethylbenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
2-Hexanone	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Isopropylbenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Methylene Chloride	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
4-Methyl-2-pentanone (MIBK)	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Methyl tert-butyl ether	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
m-Xylene & p-Xylene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
o-Xylene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Styrene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,1,2,2-Tetrachloroethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Tetrachloroethene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Toluene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
trans-1,2-Dichloroethene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
trans-1,3-Dichloropropene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,2,4-Trichlorobenzene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,1,1-Trichloroethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,1,2-Trichloroethane	ND		41.1		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Trichloroethene	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Vinyl acetate	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Vinyl chloride	ND		10.3		ug/Kg		11/24/19 19:36	11/24/19 21:02	1
Xylenes, Total	ND		5.13		ug/Kg		11/24/19 19:36	11/24/19 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*57 - 140*	*11/24/19 19:36*	*11/24/19 21:02*	*1*
Dibromofluoromethane	*120*		*68 - 140*	*11/24/19 19:36*	*11/24/19 21:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*61 - 130*	*11/24/19 19:36*	*11/24/19 21:02*	*1*
Toluene-d8 (Surr)	*120*		*50 - 130*	*11/24/19 19:36*	*11/24/19 21:02*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Acenaphthylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Benzo[a]anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Benzo[b]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Benzo[k]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Benzo[g,h,i]perylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Benzo[a]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Bis(2-chloroethoxy)methane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Bis(2-chloroethyl)ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Bis(2-ethylhexyl) phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4-Bromophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Butyl benzyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4-Chloroaniline	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Chloronaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1

Client Sample ID: CBPSB11020206
Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-2
Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Carbazole	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Chrysene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Di-n-butyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Dibenz(a,h)anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Dibenzofuran	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
3,3'-Dichlorobenzidine	ND		655		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Diethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Dimethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,6-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Di-n-octyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Fluorene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Hexachlorobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Hexachlorocyclopentadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Hexachloroethane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Hexachlorobutadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Indeno[1,2,3-cd]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Isophorone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Methylnaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Naphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
3-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Nitrobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
N-Nitrosodiphenylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
N-Nitrosodi-n-propylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Phenanthrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4-Chloro-3-methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Chlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
3 & 4 Methylphenol	ND		655		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4-Dichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4-Dimethylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2-Nitrophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
4-Nitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Pentachlorophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Phenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4,5-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
2,4,6-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
bis (2-Chloroisopropyl) ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
1,1'-Biphenyl	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1
Acetophenone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*44*		*10 - 150*	*11/19/19 10:25*	*11/20/19 14:43*	*1*

Client Sample ID: CBPSB11020206

Date Collected: 11/13/19 08:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-2

Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*72*		*25 - 132*	*11/19/19 10:25*	*11/20/19 14:43*	*1*
2-Fluorobiphenyl	*60*		*38 - 130*	*11/19/19 10:25*	*11/20/19 14:43*	*1*
2,4,6-Tribromophenol	*46*		*10 - 148*	*11/19/19 10:25*	*11/20/19 14:43*	*1*
Terphenyl-d14	*65*		*53 - 134*	*11/19/19 10:25*	*11/20/19 14:43*	*1*
Phenol-d5 (Surr)	*65*		*27 - 123*	*11/19/19 10:25*	*11/20/19 14:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1221	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1232	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1242	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1248	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1254	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1
PCB-1260	ND		16.7		ug/Kg		11/29/19 07:31	12/02/19 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*53*		*10 - 150*	*11/29/19 07:31*	*12/02/19 15:09*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 150*	*11/29/19 07:31*	*12/02/19 15:09*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.396		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Aluminum	**14500**		24.8		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Arsenic	**4.33**		0.990		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Barium	**57.4**		0.990		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Beryllium	**0.639**		0.248		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Calcium	**1440**		99.0		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Cadmium	ND		0.248		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Cobalt	**7.89**		0.495		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Chromium	**14.8**		0.495		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Copper	**12.2**		0.495		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Iron	**19000**		19.8		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Potassium	**614**		99.0		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Magnesium	**2200**		99.0		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Manganese	**195**		1.49		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Sodium	**146**		99.0		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Nickel	**13.9**		0.990		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Lead	**14.2**		0.495		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Antimony	ND		2.48		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Selenium	ND		1.98		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Thallium	ND		1.49		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Vanadium	**19.9**		0.495		mg/Kg		11/25/19 14:50	11/26/19 13:35	1
Zinc	**64.9**		1.49		mg/Kg		11/25/19 14:50	11/26/19 13:35	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**29.6**		16.7		ug/Kg		12/02/19 11:38	12/03/19 12:09	1

Client: HDR Inc
Project/Site: Paducah Downtown Development Project

Job ID: 600-195874-1
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB11012416
Date Collected: 11/13/19 09:20
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Benzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Bromodichloromethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Bromoform	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Bromomethane	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
2-Butanone (MEK)	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Carbon disulfide	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Carbon tetrachloride	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Chlorobenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Chlorobromomethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Chloroethane	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Chloroform	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Chloromethane	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
cis-1,2-Dichloroethene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
cis-1,3-Dichloropropene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Cyclohexane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Dibromochloromethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2-Dibromo-3-Chloropropane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2-Dibromoethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2-Dichlorobenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,3-Dichlorobenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,4-Dichlorobenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Dichlorodifluoromethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1-Dichloroethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2-Dichloroethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1-Dichloroethene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2-Dichloropropane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Ethylbenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
2-Hexanone	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Isopropylbenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Methylene Chloride	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
4-Methyl-2-pentanone (MIBK)	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Methyl tert-butyl ether	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
m-Xylene & p-Xylene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
o-Xylene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Styrene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1,2,2-Tetrachloroethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Tetrachloroethene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Toluene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
trans-1,2-Dichloroethene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
trans-1,3-Dichloropropene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,2,4-Trichlorobenzene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1,1-Trichloroethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1,2-Trichloroethane	ND		44.4		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Trichloroethene	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Vinyl acetate	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Vinyl chloride	ND		11.1		ug/Kg		11/24/19 19:36	11/24/19 21:24	1
Xylenes, Total	ND		5.56		ug/Kg		11/24/19 19:36	11/24/19 21:24	1

Client Sample ID: CBPSB11012416

Date Collected: 11/13/19 09:20
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-3

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*57 - 140*	*11/24/19 19:36*	*11/24/19 21:24*	*1*
Dibromofluoromethane	*117*		*68 - 140*	*11/24/19 19:36*	*11/24/19 21:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*61 - 130*	*11/24/19 19:36*	*11/24/19 21:24*	*1*
Toluene-d8 (Surr)	*111*		*50 - 130*	*11/24/19 19:36*	*11/24/19 21:24*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Acenaphthylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Benzo[a]anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Benzo[b]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Benzo[k]fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Benzo[g,h,i]perylene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Benzo[a]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Bis(2-chloroethoxy)methane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Bis(2-chloroethyl)ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Bis(2-ethylhexyl) phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Bromophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Butyl benzyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Chloroaniline	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Chloronaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Chlorophenyl phenyl ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Carbazole	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Chrysene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Di-n-butyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Dibenz(a,h)anthracene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Dibenzofuran	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
3,3'-Dichlorobenzidine	ND		654		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Diethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Dimethyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,6-Dinitrotoluene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Di-n-octyl phthalate	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Fluoranthene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Fluorene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Hexachlorobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Hexachlorocyclopentadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Hexachloroethane	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Hexachlorobutadiene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Indeno[1,2,3-cd]pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Isophorone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Methylnaphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Naphthalene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
3-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Nitroaniline	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Nitrobenzene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
N-Nitrosodiphenylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
N-Nitrosodi-n-propylamine	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1

Client Sample ID: CBPSB11012416

Lab Sample ID: 600-195874-3

Date Collected: 11/13/19 09:20
Matrix: Solid
Date Received: 11/15/19 10:12

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Pyrene	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Chloro-3-methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Chlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Methylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
3 & 4 Methylphenol	ND		654		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4-Dichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4-Dimethylphenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4,6-Dinitro-2-methylphenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4-Dinitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2-Nitrophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
4-Nitrophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Pentachlorophenol	ND		1590		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Phenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4,5-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
2,4,6-Trichlorophenol	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
bis (2-Chloroisopropyl) ether	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
1,1'-Biphenyl	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1
Acetophenone	ND		327		ug/Kg		11/19/19 10:25	11/20/19 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*10 - 150*	*11/19/19 10:25*	*11/20/19 15:19*	*1*
2-Fluorophenol	*105*		*25 - 132*	*11/19/19 10:25*	*11/20/19 15:19*	*1*
2-Fluorobiphenyl	*80*		*38 - 130*	*11/19/19 10:25*	*11/20/19 15:19*	*1*
2,4,6-Tribromophenol	*79*		*10 - 148*	*11/19/19 10:25*	*11/20/19 15:19*	*1*
Terphenyl-d14	*89*		*53 - 134*	*11/19/19 10:25*	*11/20/19 15:19*	*1*
Phenol-d5 (Surr)	*98*		*27 - 123*	*11/19/19 10:25*	*11/20/19 15:19*	*1*

Client Sample ID: CBPSB1101GW

Lab Sample ID: 600-195874-4

Date Collected: 11/13/19 11:30
Matrix: Water
Date Received: 11/15/19 10:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L			11/19/19 08:41	1
Benzene	ND		5.00		ug/L			11/19/19 08:41	1
Chlorobromomethane	ND		5.00		ug/L			11/19/19 08:41	1
Bromoform	ND		5.00		ug/L			11/19/19 08:41	1
Bromomethane	ND		10.0		ug/L			11/19/19 08:41	1
2-Butanone (MEK)	ND		10.0		ug/L			11/19/19 08:41	1
Carbon disulfide	ND		10.0		ug/L			11/19/19 08:41	1
Carbon tetrachloride	ND		5.00		ug/L			11/19/19 08:41	1
Dibromochloromethane	ND		5.00		ug/L			11/19/19 08:41	1
Chlorobenzene	ND		5.00		ug/L			11/19/19 08:41	1
Chloroethane	ND		10.0		ug/L			11/19/19 08:41	1
Chloroform	ND		10.0		ug/L			11/19/19 08:41	1
Chloromethane	ND		10.0		ug/L			11/19/19 08:41	1
1,1-Dichloroethane	ND		5.00		ug/L			11/19/19 08:41	1
1,2-Dichloroethane	ND		5.00		ug/L			11/19/19 08:41	1
1,1-Dichloroethene	ND		5.00		ug/L			11/19/19 08:41	1

Client Sample ID: CBPSB1101GW

Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 08:41	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 08:41	1
1,2-Dichloropropane	ND		5.00		ug/L			11/19/19 08:41	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 08:41	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 08:41	1
Ethylbenzene	ND		5.00		ug/L			11/19/19 08:41	1
2-Hexanone	ND		10.0		ug/L			11/19/19 08:41	1
Methylene Chloride	ND		10.0		ug/L			11/19/19 08:41	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/19/19 08:41	1
Styrene	ND		5.00		ug/L			11/19/19 08:41	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/19/19 08:41	1
Tetrachloroethene	**10.9**		5.00		ug/L			11/19/19 08:41	1
Toluene	ND		5.00		ug/L			11/19/19 08:41	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/19/19 08:41	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/19/19 08:41	1
Trichloroethene	ND		5.00		ug/L			11/19/19 08:41	1
Vinyl acetate	ND	*	10.0		ug/L			11/19/19 08:41	1
Vinyl chloride	ND		5.00		ug/L			11/19/19 08:41	1
o-Xylene	ND		5.00		ug/L			11/19/19 08:41	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/19/19 08:41	1
Xylenes, Total	ND		5.00		ug/L			11/19/19 08:41	1
Bromodichloromethane	ND		5.00		ug/L			11/19/19 08:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/19/19 08:41	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/19/19 08:41	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/19/19 08:41	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/19/19 08:41	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/19/19 08:41	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/19/19 08:41	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/19/19 08:41	1
1,2-Dibromoethane	ND		5.00		ug/L			11/19/19 08:41	1
Isopropylbenzene	ND		5.00		ug/L			11/19/19 08:41	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/19/19 08:41	1
Cyclohexane	ND		5.00		ug/L			11/19/19 08:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*11/19/19 08:41*	*1*
Dibromofluoromethane	*75*		*62 - 130*		*11/19/19 08:41*	*1*
4-Bromofluorobenzene	*82*		*67 - 139*		*11/19/19 08:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*64*		*50 - 134*		*11/19/19 08:41*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Acenaphthylene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Anthracene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Benzo[a]anthracene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Benzo[b]fluoranthene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Benzo[k]fluoranthene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Benzo[g,h,i]perylene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Benzo[a]pyrene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1

Client Sample ID: CBPSB1101GW
Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-4
Matrix: Water

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Bis(2-ethylhexyl) phthalate	ND	*	10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Butyl benzyl phthalate	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Chloroaniline	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Chloronaphthalene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Carbazole	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Chrysene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Di-n-butyl phthalate	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Dibenz(a,h)anthracene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Dibenzofuran	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
3,3'-Dichlorobenzidine	ND		20.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Diethyl phthalate	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Dimethyl phthalate	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,4-Dinitrotoluene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,6-Dinitrotoluene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Di-n-octyl phthalate	ND	*	10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Fluoranthene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Fluorene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Hexachlorobenzene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Hexachloroethane	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Hexachlorobutadiene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Indeno[1,2,3-cd]pyrene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Isophorone	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Methylnaphthalene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Naphthalene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Nitroaniline	ND		50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
3-Nitroaniline	ND		50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Nitroaniline	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Nitrobenzene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
N-Nitrosodiphenylamine	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Phenanthrene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Pyrene	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Chlorophenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Methylphenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
3 & 4 Methylphenol	ND		20.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,4-Dichlorophenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,4-Dimethylphenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4,6-Dinitro-2-methylphenol	ND		50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,4-Dinitrophenol	ND		50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2-Nitrophenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
4-Nitrophenol	ND		50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Pentachlorophenol	ND	*	50.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Phenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1

Client Sample ID: CBPSB1101GW

Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-4

Matrix: Water

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
bis (2-Chloroisopropyl) ether	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
1,1'-Biphenyl	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1
Acetophenone	ND		10.0		ug/L		11/18/19 10:40	11/19/19 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*24 - 150*	*11/18/19 10:40*	*11/19/19 20:40*	*1*
2-Fluorophenol	*46*		*10 - 130*	*11/18/19 10:40*	*11/19/19 20:40*	*1*
2-Fluorobiphenyl	*82*		*38 - 133*	*11/18/19 10:40*	*11/19/19 20:40*	*1*
2,4,6-Tribromophenol	*53*		*19 - 150*	*11/18/19 10:40*	*11/19/19 20:40*	*1*
Terphenyl-d14	*83*		*35 - 150*	*11/18/19 10:40*	*11/19/19 20:40*	*1*
Phenol-d5 (Surr)	*39*		*10 - 130*	*11/18/19 10:40*	*11/19/19 20:40*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Aluminum	ND		0.500		mg/L		11/20/19 13:24	11/25/19 15:29	1
Arsenic	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Barium	**0.0767**		0.0200		mg/L		11/20/19 13:24	11/25/19 15:29	1
Beryllium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 15:29	1
Calcium	**56.9**		1.00		mg/L		11/20/19 13:24	11/25/19 15:29	1
Cadmium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 15:29	1
Cobalt	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Chromium	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Copper	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Iron	**0.698**		0.400		mg/L		11/20/19 13:24	11/25/19 15:29	1
Potassium	**5.23**		1.00		mg/L		11/20/19 13:24	11/25/19 15:29	1
Magnesium	**25.4**		1.00		mg/L		11/20/19 13:24	11/25/19 15:29	1
Manganese	**0.944**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Sodium	**56.9**		1.00		mg/L		11/20/19 13:24	11/25/19 15:29	1
Nickel	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Lead	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Antimony	ND		0.0500		mg/L		11/20/19 13:24	11/25/19 15:29	1
Selenium	ND		0.0400		mg/L		11/20/19 13:24	11/25/19 15:29	1
Thallium	ND		0.0300		mg/L		11/20/19 13:24	11/25/19 15:29	1
Vanadium	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:29	1
Zinc	**0.0377**		0.0300		mg/L		11/20/19 13:24	11/25/19 15:29	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Aluminum	ND		0.556		mg/L		12/05/19 17:01	12/06/19 14:16	1
Arsenic	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Barium	**0.0742**		0.0222		mg/L		12/05/19 17:01	12/06/19 14:16	1
Beryllium	ND		0.00556		mg/L		12/05/19 17:01	12/06/19 14:16	1
Calcium	**55.9**		1.11		mg/L		12/05/19 17:01	12/06/19 14:16	1
Cadmium	ND		0.00556		mg/L		12/05/19 17:01	12/06/19 14:16	1
Cobalt	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Chromium	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1

Client Sample ID: CBPSB1101GW

Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-4

Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Iron	**0.706**		0.444		mg/L		12/05/19 17:01	12/06/19 14:16	1
Potassium	**5.05**		1.11		mg/L		12/05/19 17:01	12/06/19 14:16	1
Magnesium	**24.2**		1.11		mg/L		12/05/19 17:01	12/06/19 14:16	1
Manganese	**1.02**		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Sodium	**55.3**		1.11		mg/L		12/05/19 17:01	12/06/19 14:16	1
Nickel	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Lead	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Antimony	ND		0.0556		mg/L		12/05/19 17:01	12/06/19 14:16	1
Selenium	ND		0.0444		mg/L		12/05/19 17:01	12/06/19 14:16	1
Thallium	**0.0343**		0.0333		mg/L		12/05/19 17:01	12/06/19 14:16	1
Vanadium	ND		0.0111		mg/L		12/05/19 17:01	12/06/19 14:16	1
Zinc	**0.0450**		0.0333		mg/L		12/05/19 17:01	12/06/19 14:16	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/03/19 08:51	12/03/19 14:30	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/11/19 10:06	12/11/19 15:11	1

Client Sample ID: CBPSB1102GW

Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**21.4**		10.0		ug/L			11/19/19 09:07	1
Benzene	ND		5.00		ug/L			11/19/19 09:07	1
Chlorobromomethane	ND		5.00		ug/L			11/19/19 09:07	1
Bromoform	ND		5.00		ug/L			11/19/19 09:07	1
Bromomethane	ND		10.0		ug/L			11/19/19 09:07	1
2-Butanone (MEK)	ND		10.0		ug/L			11/19/19 09:07	1
Carbon disulfide	ND		10.0		ug/L			11/19/19 09:07	1
Carbon tetrachloride	ND		5.00		ug/L			11/19/19 09:07	1
Dibromochloromethane	ND		5.00		ug/L			11/19/19 09:07	1
Chlorobenzene	ND		5.00		ug/L			11/19/19 09:07	1
Chloroethane	ND		10.0		ug/L			11/19/19 09:07	1
Chloroform	ND		10.0		ug/L			11/19/19 09:07	1
Chloromethane	ND		10.0		ug/L			11/19/19 09:07	1
1,1-Dichloroethane	ND		5.00		ug/L			11/19/19 09:07	1
1,2-Dichloroethane	ND		5.00		ug/L			11/19/19 09:07	1
1,1-Dichloroethene	ND		5.00		ug/L			11/19/19 09:07	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 09:07	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 09:07	1
1,2-Dichloropropane	ND		5.00		ug/L			11/19/19 09:07	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 09:07	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 09:07	1
Ethylbenzene	ND		5.00		ug/L			11/19/19 09:07	1

Client Sample ID: CBPSB1102GW

Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		10.0		ug/L			11/19/19 09:07	1
Methylene Chloride	ND		10.0		ug/L			11/19/19 09:07	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/19/19 09:07	1
Styrene	ND		5.00		ug/L			11/19/19 09:07	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/19/19 09:07	1
Tetrachloroethene	**12.6**		5.00		ug/L			11/19/19 09:07	1
Toluene	ND		5.00		ug/L			11/19/19 09:07	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/19/19 09:07	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/19/19 09:07	1
Trichloroethene	ND		5.00		ug/L			11/19/19 09:07	1
Vinyl acetate	ND	*	10.0		ug/L			11/19/19 09:07	1
Vinyl chloride	ND		5.00		ug/L			11/19/19 09:07	1
o-Xylene	ND		5.00		ug/L			11/19/19 09:07	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/19/19 09:07	1
Xylenes, Total	ND		5.00		ug/L			11/19/19 09:07	1
Bromodichloromethane	ND		5.00		ug/L			11/19/19 09:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/19/19 09:07	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/19/19 09:07	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/19/19 09:07	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:07	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:07	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:07	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/19/19 09:07	1
1,2-Dibromoethane	ND		5.00		ug/L			11/19/19 09:07	1
Isopropylbenzene	ND		5.00		ug/L			11/19/19 09:07	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/19/19 09:07	1
Cyclohexane	ND		5.00		ug/L			11/19/19 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*11/19/19 09:07*	*1*
Dibromofluoromethane	*75*		*62 - 130*		*11/19/19 09:07*	*1*
4-Bromofluorobenzene	*90*		*67 - 139*		*11/19/19 09:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*66*		*50 - 134*		*11/19/19 09:07*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Acenaphthylene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Anthracene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Benzo[a]anthracene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Benzo[b]fluoranthene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Benzo[k]fluoranthene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Benzo[g,h,i]perylene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Benzo[a]pyrene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Bis(2-chloroethoxy)methane	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Bis(2-chloroethyl)ether	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Bis(2-ethylhexyl) phthalate	ND	*	10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Bromophenyl phenyl ether	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Butyl benzyl phthalate	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Chloroaniline	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1

Client: HDR Inc
Project/Site: Paducah Downtown Development Project

Job ID: 600-195874-1
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB1102GW
Date Collected: 11/13/19 11:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-5
Matrix: Water

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Chlorophenyl phenyl ether	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Carbazole	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Chrysene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Di-n-butyl phthalate	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Dibenz(a,h)anthracene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Dibenzofuran	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
3,3'-Dichlorobenzidine	ND		21.7		ug/L		11/18/19 10:40	11/19/19 21:06	1
Diethyl phthalate	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Dimethyl phthalate	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4-Dinitrotoluene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,6-Dinitrotoluene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Di-n-octyl phthalate	ND	*	10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Fluoranthene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Fluorene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Hexachlorobenzene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Hexachlorocyclopentadiene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Hexachloroethane	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Hexachlorobutadiene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Indeno[1,2,3-cd]pyrene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Isophorone	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2-Methylnaphthalene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Naphthalene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2-Nitroaniline	ND		54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
3-Nitroaniline	ND		54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Nitroaniline	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Nitrobenzene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
N-Nitrosodiphenylamine	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
N-Nitrosodi-n-propylamine	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Phenanthrene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Pyrene	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Chloro-3-methylphenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2-Chlorophenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2-Methylphenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
3 & 4 Methylphenol	ND		21.7		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4-Dichlorophenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4-Dimethylphenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4,6-Dinitro-2-methylphenol	ND		54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4-Dinitrophenol	ND		54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
2-Nitrophenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
4-Nitrophenol	ND		54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
Pentachlorophenol	ND	*	54.3		ug/L		11/18/19 10:40	11/19/19 21:06	1
Phenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4,5-Trichlorophenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
2,4,6-Trichlorophenol	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
bis (2-Chloroisopropyl) ether	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
1,1'-Biphenyl	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1
Acetophenone	ND		10.9		ug/L		11/18/19 10:40	11/19/19 21:06	1

Client Sample ID: CBPSB1102GW

Lab Sample ID: 600-195874-5

Date Collected: 11/13/19 11:30
Matrix: Water
Date Received: 11/15/19 10:12

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*24 - 150*	*11/18/19 10:40*	*11/19/19 21:06*	*1*
2-Fluorophenol	*27*		*10 - 130*	*11/18/19 10:40*	*11/19/19 21:06*	*1*
2-Fluorobiphenyl	*64*		*38 - 133*	*11/18/19 10:40*	*11/19/19 21:06*	*1*
2,4,6-Tribromophenol	*41*		*19 - 150*	*11/18/19 10:40*	*11/19/19 21:06*	*1*
Terphenyl-d14	*83*		*35 - 150*	*11/18/19 10:40*	*11/19/19 21:06*	*1*
Phenol-d5 (Surr)	*23*		*10 - 130*	*11/18/19 10:40*	*11/19/19 21:06*	*1*

Client Sample ID: CBPSB14010206

Lab Sample ID: 600-195874-6

Date Collected: 11/13/19 12:30
Matrix: Solid
Date Received: 11/15/19 10:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Benzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Bromodichloromethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Bromoform	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Bromomethane	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
2-Butanone (MEK)	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Carbon disulfide	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Carbon tetrachloride	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Chlorobenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Chlorobromomethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Chloroethane	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Chloroform	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Chloromethane	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
cis-1,2-Dichloroethene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
cis-1,3-Dichloropropene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Cyclohexane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Dibromochloromethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2-Dibromo-3-Chloropropane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2-Dibromoethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2-Dichlorobenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,3-Dichlorobenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,4-Dichlorobenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Dichlorodifluoromethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1-Dichloroethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2-Dichloroethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1-Dichloroethene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2-Dichloropropane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Ethylbenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
2-Hexanone	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Isopropylbenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Methylene Chloride	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
4-Methyl-2-pentanone (MIBK)	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Methyl tert-butyl ether	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
m-Xylene & p-Xylene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
o-Xylene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Styrene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1,2,2-Tetrachloroethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1

Client Sample ID: CBPSB14010206
Date Collected: 11/13/19 12:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Toluene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
trans-1,2-Dichloroethene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
trans-1,3-Dichloropropene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,2,4-Trichlorobenzene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1,1-Trichloroethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1,2-Trichloroethane	ND		38.0		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Trichloroethene	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Vinyl acetate	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Vinyl chloride	ND		9.49		ug/Kg		11/24/19 19:36	11/24/19 21:47	1
Xylenes, Total	ND		4.74		ug/Kg		11/24/19 19:36	11/24/19 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*57 - 140*	*11/24/19 19:36*	*11/24/19 21:47*	*1*
Dibromofluoromethane	*114*		*68 - 140*	*11/24/19 19:36*	*11/24/19 21:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*61 - 130*	*11/24/19 19:36*	*11/24/19 21:47*	*1*
Toluene-d8 (Surr)	*117*		*50 - 130*	*11/24/19 19:36*	*11/24/19 21:47*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Acenaphthylene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Anthracene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Benzo[a]anthracene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Benzo[b]fluoranthene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Benzo[k]fluoranthene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Benzo[g,h,i]perylene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Benzo[a]pyrene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Bis(2-chloroethoxy)methane	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Bis(2-chloroethyl)ether	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Bis(2-ethylhexyl) phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Bromophenyl phenyl ether	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Butyl benzyl phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Chloroaniline	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Chloronaphthalene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Chlorophenyl phenyl ether	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Carbazole	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Chrysene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Di-n-butyl phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Dibenz(a,h)anthracene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Dibenzofuran	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
3,3'-Dichlorobenzidine	ND		6530		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Diethyl phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Dimethyl phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4-Dinitrotoluene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,6-Dinitrotoluene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Di-n-octyl phthalate	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Fluoranthene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Fluorene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10

Client Sample ID: CBPSB14010206
Date Collected: 11/13/19 12:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-6
Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Hexachlorocyclopentadiene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Hexachloroethane	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Hexachlorobutadiene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Indeno[1,2,3-cd]pyrene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Isophorone	**6110**		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Methylnaphthalene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Naphthalene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Nitroaniline	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
3-Nitroaniline	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Nitroaniline	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Nitrobenzene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
N-Nitrosodiphenylamine	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
N-Nitrosodi-n-propylamine	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Phenanthrene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Pyrene	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Chloro-3-methylphenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Chlorophenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Methylphenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
3 & 4 Methylphenol	ND		6530		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4-Dichlorophenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4-Dimethylphenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4,6-Dinitro-2-methylphenol	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4-Dinitrophenol	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2-Nitrophenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
4-Nitrophenol	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Pentachlorophenol	ND		15800		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Phenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4,5-Trichlorophenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
2,4,6-Trichlorophenol	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
bis (2-Chloroisopropyl) ether	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
1,1'-Biphenyl	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10
Acetophenone	ND		3270		ug/Kg		11/19/19 10:25	11/20/19 15:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*56*		*10 - 150*	*11/19/19 10:25*	*11/20/19 15:54*	*10*
2-Fluorophenol	*63*		*25 - 132*	*11/19/19 10:25*	*11/20/19 15:54*	*10*
2-Fluorobiphenyl	*67*		*38 - 130*	*11/19/19 10:25*	*11/20/19 15:54*	*10*
2,4,6-Tribromophenol	*43*		*10 - 148*	*11/19/19 10:25*	*11/20/19 15:54*	*10*
Terphenyl-d14	*63*		*53 - 134*	*11/19/19 10:25*	*11/20/19 15:54*	*10*
Phenol-d5 (Surr)	*52*		*27 - 123*	*11/19/19 10:25*	*11/20/19 15:54*	*10*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.392		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Aluminum	**12500**		24.5		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Arsenic	**8.65**		0.980		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Barium	**42.6**		0.980		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Beryllium	**1.38**		0.245		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Calcium	**1430**		98.0		mg/Kg		11/25/19 14:50	11/26/19 13:37	1

Client Sample ID: CBPSB14010206

Lab Sample ID: 600-195874-6

Date Collected: 11/13/19 12:30
Date Received: 11/15/19 10:12

Matrix: Solid

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.652		0.245		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Cobalt	15.7		0.490		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Chromium	13.0		0.490		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Copper	13.2		0.490		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Iron	30500		19.6		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Potassium	650		98.0		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Magnesium	2690		98.0		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Manganese	368		1.47		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Sodium	ND		98.0		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Nickel	32.5		0.980		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Lead	14.9		0.490		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Antimony	ND		2.45		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Selenium	ND		1.96		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Thallium	ND		1.47		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Vanadium	25.4		0.490		mg/Kg		11/25/19 14:50	11/26/19 13:37	1
Zinc	88.1		1.47		mg/Kg		11/25/19 14:50	11/26/19 13:37	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17.8		16.2		ug/Kg		12/02/19 11:38	12/03/19 12:15	1

Client Sample ID: CBPSB14012830

Lab Sample ID: 600-195874-7

Date Collected: 11/13/19 13:45
Date Received: 11/15/19 10:12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	17.8		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Benzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Bromodichloromethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Bromoform	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Bromomethane	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
2-Butanone (MEK)	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Carbon disulfide	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Carbon tetrachloride	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Chlorobenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Chlorobromomethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Chloroethane	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Chloroform	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Chloromethane	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
cis-1,2-Dichloroethene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
cis-1,3-Dichloropropene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Cyclohexane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Dibromochloromethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2-Dibromo-3-Chloropropane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2-Dibromoethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2-Dichlorobenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,3-Dichlorobenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,4-Dichlorobenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Dichlorodifluoromethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1

Client Sample ID: CBPSB14012830

Date Collected: 11/13/19 13:45
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2-Dichloroethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,1-Dichloroethene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2-Dichloropropane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Ethylbenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
2-Hexanone	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Isopropylbenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Methylene Chloride	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
4-Methyl-2-pentanone (MIBK)	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Methyl tert-butyl ether	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
m-Xylene & p-Xylene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
o-Xylene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Styrene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,1,2,2-Tetrachloroethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Tetrachloroethene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Toluene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
trans-1,2-Dichloroethene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
trans-1,3-Dichloropropene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,2,4-Trichlorobenzene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,1,1-Trichloroethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,1,2-Trichloroethane	ND		39.7		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Trichloroethene	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Vinyl acetate	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Vinyl chloride	ND		9.92		ug/Kg		11/24/19 19:36	11/24/19 22:09	1
Xylenes, Total	ND		4.96		ug/Kg		11/24/19 19:36	11/24/19 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*57 - 140*	*11/24/19 19:36*	*11/24/19 22:09*	*1*
Dibromofluoromethane	*108*		*68 - 140*	*11/24/19 19:36*	*11/24/19 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*61 - 130*	*11/24/19 19:36*	*11/24/19 22:09*	*1*
Toluene-d8 (Surr)	*111*		*50 - 130*	*11/24/19 19:36*	*11/24/19 22:09*	*1*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Acenaphthylene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Anthracene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Benzo[a]anthracene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Benzo[b]fluoranthene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Benzo[k]fluoranthene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Benzo[g,h,i]perylene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Benzo[a]pyrene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Bis(2-chloroethoxy)methane	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Bis(2-chloroethyl)ether	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Bis(2-ethylhexyl) phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4-Bromophenyl phenyl ether	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Butyl benzyl phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4-Chloroaniline	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Chloronaphthalene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1

Client Sample ID: CBPSB14012830
Date Collected: 11/13/19 13:45
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-7
Matrix: Solid

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Carbazole	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Chrysene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Di-n-butyl phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Dibenz(a,h)anthracene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Dibenzofuran	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
3,3'-Dichlorobenzidine	ND		658		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Diethyl phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Dimethyl phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4-Dinitrotoluene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,6-Dinitrotoluene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Di-n-octyl phthalate	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Fluoranthene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Fluorene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Hexachlorobenzene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Hexachlorocyclopentadiene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Hexachloroethane	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Hexachlorobutadiene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Indeno[1,2,3-cd]pyrene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Isophorone	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Methylnaphthalene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Naphthalene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
3-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Nitrobenzene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
N-Nitrosodiphenylamine	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
N-Nitrosodi-n-propylamine	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Phenanthrene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Pyrene	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4-Chloro-3-methylphenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Chlorophenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Methylphenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
3 & 4 Methylphenol	ND		658		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4-Dichlorophenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4-Dimethylphenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4,6-Dinitro-2-methylphenol	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4-Dinitrophenol	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2-Nitrophenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
4-Nitrophenol	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Pentachlorophenol	ND		1600		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Phenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4,5-Trichlorophenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
2,4,6-Trichlorophenol	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
bis (2-Chloroisopropyl) ether	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
1,1'-Biphenyl	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1
Acetophenone	ND		329		ug/Kg		11/19/19 10:25	11/20/19 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*10 - 150*	*11/19/19 10:25*	*11/20/19 16:30*	*1*

Client Sample ID: CBPSB14012830

Lab Sample ID: 600-195874-7
Matrix: Solid
Date Collected: 11/13/19 13:45
Date Received: 11/15/19 10:12

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*101*		*25 - 132*	*11/19/19 10:25*	*11/20/19 16:30*	*1*
2-Fluorobiphenyl	*82*		*38 - 130*	*11/19/19 10:25*	*11/20/19 16:30*	*1*
2,4,6-Tribromophenol	*83*		*10 - 148*	*11/19/19 10:25*	*11/20/19 16:30*	*1*
Terphenyl-d14	*91*		*53 - 134*	*11/19/19 10:25*	*11/20/19 16:30*	*1*
Phenol-d5 (Surr)	*97*		*27 - 123*	*11/19/19 10:25*	*11/20/19 16:30*	*1*

Client Sample ID: CBPSB1401GW

Lab Sample ID: 600-195874-8
Matrix: Water
Date Collected: 11/14/19 07:30
Date Received: 11/15/19 10:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L			11/19/19 09:33	1
Chlorobromomethane	ND		5.00		ug/L			11/19/19 09:33	1
Bromoform	ND		5.00		ug/L			11/19/19 09:33	1
Bromomethane	ND		10.0		ug/L			11/19/19 09:33	1
2-Butanone (MEK)	ND		10.0		ug/L			11/19/19 09:33	1
Carbon disulfide	ND		10.0		ug/L			11/19/19 09:33	1
Carbon tetrachloride	ND		5.00		ug/L			11/19/19 09:33	1
Dibromochloromethane	ND		5.00		ug/L			11/19/19 09:33	1
Chlorobenzene	ND		5.00		ug/L			11/19/19 09:33	1
Chloroethane	ND		10.0		ug/L			11/19/19 09:33	1
Chloroform	ND		10.0		ug/L			11/19/19 09:33	1
Chloromethane	ND		10.0		ug/L			11/19/19 09:33	1
1,1-Dichloroethane	ND		5.00		ug/L			11/19/19 09:33	1
1,2-Dichloroethane	ND		5.00		ug/L			11/19/19 09:33	1
1,1-Dichloroethene	ND		5.00		ug/L			11/19/19 09:33	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 09:33	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 09:33	1
1,2-Dichloropropane	ND		5.00		ug/L			11/19/19 09:33	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 09:33	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 09:33	1
Ethylbenzene	**62.8**		5.00		ug/L			11/19/19 09:33	1
2-Hexanone	ND		10.0		ug/L			11/19/19 09:33	1
Methylene Chloride	ND		10.0		ug/L			11/19/19 09:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/19/19 09:33	1
Styrene	ND		5.00		ug/L			11/19/19 09:33	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/19/19 09:33	1
Tetrachloroethene	ND		5.00		ug/L			11/19/19 09:33	1
Toluene	**98.6**		5.00		ug/L			11/19/19 09:33	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/19/19 09:33	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/19/19 09:33	1
Trichloroethene	ND		5.00		ug/L			11/19/19 09:33	1
Vinyl acetate	ND	*	10.0		ug/L			11/19/19 09:33	1
Vinyl chloride	ND		5.00		ug/L			11/19/19 09:33	1
o-Xylene	**12.7**		5.00		ug/L			11/19/19 09:33	1
m-Xylene & p-Xylene	**94.5**		5.00		ug/L			11/19/19 09:33	1
Xylenes, Total	**107**		5.00		ug/L			11/19/19 09:33	1
Bromodichloromethane	ND		5.00		ug/L			11/19/19 09:33	1

Client Sample ID: CBPSB1401GW

Date Collected: 11/14/19 07:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/19/19 09:33	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/19/19 09:33	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/19/19 09:33	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:33	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:33	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/19/19 09:33	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/19/19 09:33	1
1,2-Dibromoethane	ND		5.00		ug/L			11/19/19 09:33	1
Isopropylbenzene	**16.8**		5.00		ug/L			11/19/19 09:33	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/19/19 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*11/19/19 09:33*	*1*
Dibromofluoromethane	*77*		*62 - 130*		*11/19/19 09:33*	*1*
4-Bromofluorobenzene	*90*		*67 - 139*		*11/19/19 09:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*65*		*50 - 134*		*11/19/19 09:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**440**		25.0		ug/L			11/19/19 16:22	5
Cyclohexane	**122**		25.0		ug/L			11/19/19 16:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*11/19/19 16:22*	*5*
Dibromofluoromethane	*74*		*62 - 130*		*11/19/19 16:22*	*5*
4-Bromofluorobenzene	*92*		*67 - 139*		*11/19/19 16:22*	*5*
1,2-Dichloroethane-d4 (Surr)	*67*		*50 - 134*		*11/19/19 16:22*	*5*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Acenaphthylene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Anthracene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Benzo[a]anthracene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Benzo[b]fluoranthene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Benzo[k]fluoranthene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Benzo[g,h,i]perylene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Benzo[a]pyrene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Bis(2-chloroethoxy)methane	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Bis(2-chloroethyl)ether	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Bis(2-ethylhexyl) phthalate	ND	*	10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Bromophenyl phenyl ether	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Butyl benzyl phthalate	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Chloroaniline	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Chloronaphthalene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Chlorophenyl phenyl ether	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Carbazole	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Chrysene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Di-n-butyl phthalate	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Dibenz(a,h)anthracene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1

Client Sample ID: CBPSB1401GW

Date Collected: 11/14/19 07:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-8

Matrix: Water

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
3,3'-Dichlorobenzidine	ND		20.8		ug/L		11/18/19 10:40	11/19/19 21:31	1
Diethyl phthalate	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Dimethyl phthalate	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4-Dinitrotoluene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,6-Dinitrotoluene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Di-n-octyl phthalate	ND	*	10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Fluoranthene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Fluorene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Hexachlorobenzene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Hexachlorocyclopentadiene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Hexachloroethane	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Hexachlorobutadiene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Indeno[1,2,3-cd]pyrene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Isophorone	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Methylnaphthalene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Naphthalene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Nitroaniline	ND		52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
3-Nitroaniline	ND		52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Nitroaniline	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Nitrobenzene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
N-Nitrosodiphenylamine	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
N-Nitrosodi-n-propylamine	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Phenanthrene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Pyrene	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Chloro-3-methylphenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Chlorophenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Methylphenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
3 & 4 Methylphenol	ND		20.8		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4-Dichlorophenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4-Dimethylphenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4,6-Dinitro-2-methylphenol	ND		52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4-Dinitrophenol	ND		52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
2-Nitrophenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
4-Nitrophenol	ND		52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
Pentachlorophenol	ND	*	52.1		ug/L		11/18/19 10:40	11/19/19 21:31	1
Phenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4,5-Trichlorophenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
2,4,6-Trichlorophenol	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
bis (2-Chloroisopropyl) ether	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
1,1'-Biphenyl	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1
Acetophenone	ND		10.4		ug/L		11/18/19 10:40	11/19/19 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*104*		*24 - 150*	*11/18/19 10:40*	*11/19/19 21:31*	*1*
2-Fluorophenol	*69*		*10 - 130*	*11/18/19 10:40*	*11/19/19 21:31*	*1*
2-Fluorobiphenyl	*91*		*38 - 133*	*11/18/19 10:40*	*11/19/19 21:31*	*1*
2,4,6-Tribromophenol	*70*		*19 - 150*	*11/18/19 10:40*	*11/19/19 21:31*	*1*
Terphenyl-d14	*94*		*35 - 150*	*11/18/19 10:40*	*11/19/19 21:31*	*1*
Phenol-d5 (Surr)	*59*		*10 - 130*	*11/18/19 10:40*	*11/19/19 21:31*	*1*

Client Sample ID: CBPSB1401GW

Date Collected: 11/14/19 07:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-8

Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Aluminum	**48.2**		0.500		mg/L		11/20/19 13:24	11/25/19 15:31	1
Arsenic	**0.0171**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Barium	**0.314**		0.0200		mg/L		11/20/19 13:24	11/25/19 15:31	1
Beryllium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 15:31	1
Calcium	**59.6**		1.00		mg/L		11/20/19 13:24	11/25/19 15:31	1
Cadmium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 15:31	1
Cobalt	**0.0206**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Chromium	**0.0533**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Copper	**0.0322**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Iron	**60.9**		0.400		mg/L		11/20/19 13:24	11/25/19 15:31	1
Potassium	**7.92**		1.00		mg/L		11/20/19 13:24	11/25/19 15:31	1
Magnesium	**80.9**		1.00		mg/L		11/20/19 13:24	11/25/19 15:31	1
Manganese	**0.564**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Sodium	**56.5**		1.00		mg/L		11/20/19 13:24	11/25/19 15:31	1
Nickel	**0.0426**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Lead	**0.0159**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Antimony	ND		0.0500		mg/L		11/20/19 13:24	11/25/19 15:31	1
Selenium	ND		0.0400		mg/L		11/20/19 13:24	11/25/19 15:31	1
Thallium	ND		0.0300		mg/L		11/20/19 13:24	11/25/19 15:31	1
Vanadium	**0.0895**		0.0100		mg/L		11/20/19 13:24	11/25/19 15:31	1
Zinc	**0.131**		0.0300		mg/L		11/20/19 13:24	11/25/19 15:31	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Aluminum	ND		0.500		mg/L		12/05/19 17:01	12/06/19 14:18	1
Arsenic	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Barium	**0.0951**	**F2**	0.0200		mg/L		12/05/19 17:01	12/06/19 14:18	1
Beryllium	ND	F2	0.00500		mg/L		12/05/19 17:01	12/06/19 14:18	1
Calcium	**52.8**		1.00		mg/L		12/05/19 17:01	12/06/19 14:18	1
Cadmium	ND	F2	0.00500		mg/L		12/05/19 17:01	12/06/19 14:18	1
Cobalt	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Chromium	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Copper	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Iron	ND		0.400		mg/L		12/05/19 17:01	12/06/19 14:18	1
Potassium	**1.96**		1.00		mg/L		12/05/19 17:01	12/06/19 14:18	1
Magnesium	**70.8**		1.00		mg/L		12/05/19 17:01	12/06/19 14:18	1
Manganese	**0.216**	**F2**	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Sodium	**57.4**		1.00		mg/L		12/05/19 17:01	12/06/19 14:18	1
Nickel	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Lead	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Antimony	ND	F2	0.0500		mg/L		12/05/19 17:01	12/06/19 14:18	1
Selenium	ND	F2	0.0400		mg/L		12/05/19 17:01	12/06/19 14:18	1
Thallium	ND	F2	0.0300		mg/L		12/05/19 17:01	12/06/19 14:18	1
Vanadium	ND	F2	0.0100		mg/L		12/05/19 17:01	12/06/19 14:18	1
Zinc	**0.0589**		0.0300		mg/L		12/05/19 17:01	12/06/19 14:18	1

Client Sample Results

Client: HDR Inc
Project/Site: Paducah Downtown Development Project

Job ID: 600-195874-1
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB1401GW

Date Collected: 11/14/19 07:30
Date Received: 11/15/19 10:12

Lab Sample ID: 600-195874-8

Matrix: Water

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/03/19 08:51	12/03/19 14:28	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/09/19 09:33	12/09/19 14:21	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F4	MS/MSD RPD exceeds control limits due to sample size difference.

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)

Surrogate Summary

Client: HDR Inc
Project/Site: Paducah Downtown Development Project

Job ID: 600-195874-1
SDG: City Block Parcel - Paduckah KY

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(57-140)	(68-140)	(61-130)	(50-130)
600-195874-1	CBPSB11010206	110	111	103	110
600-195874-2	CBPSB11020206	122	120	125	120
600-195874-3	CBPSB11012416	117	117	120	111
600-195874-6	CBPSB14010206	120	114	118	117
600-195874-7	CBPSB14012830	110	108	114	111
LCS 600-281190/3	Lab Control Sample	113	113	106	112
LCSD 600-281190/4	Lab Control Sample Dup	111	115	111	105
MB 600-281190/6	Method Blank	115	117	125	111

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-195874-4	CBPSB1101GW	89	75	82	64
600-195874-5	CBPSB1102GW	86	75	90	66
600-195874-8	CBPSB1401GW	87	77	90	65
600-195874-8 - DL	CBPSB1401GW	86	74	92	67
LCS 600-280650/4	Lab Control Sample	97	92	91	83
LCS 600-280696/4	Lab Control Sample	90	88	90	83
LCSD 600-280650/5	Lab Control Sample Dup	109	102	101	92
LCSD 600-280696/5	Lab Control Sample Dup	89	87	90	83
MB 600-280650/6	Method Blank	87	77	92	66
MB 600-280696/7	Method Blank	85	74	92	67

Surrogate Legend

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

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(10-150)	(25-132)	(38-130)	(10-148)	(53-134)	(27-123)
600-195495-A-1-F MS	Matrix Spike	51	75	85	111	92	76
600-195495-A-1-G MSD	Matrix Spike Duplicate	72	79	86	117	99	81
600-195874-1	CBPSB11010206	44	71	70	41	69	38
600-195874-2	CBPSB11020206	44	72	60	46	65	65
600-195874-3	CBPSB11012416	67	105	80	79	89	98
600-195874-6	CBPSB14010206	56	63	67	43	63	52
600-195874-7	CBPSB14012830	77	101	82	83	91	97

Surrogate Summary

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(10-150)	(25-132)	(38-130)	(10-148)	(53-134)	(27-123)
LCS 600-280706/2-A	Lab Control Sample	76	77	82	94	79	79
MB 600-280706/1-A	Method Blank	53	55	56	36	58	56

Surrogate Legend

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

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	FBP	TBP	TPHL	PHL
Lab Sample ID	Client Sample ID	(24-150)	(10-130)	(38-133)	(19-150)	(35-150)	(10-130)
600-195874-4	CBPSB1101GW	92	46	82	53	83	39
600-195874-5	CBPSB1102GW	76	27	64	41	83	23
600-195874-8	CBPSB1401GW	104	69	91	70	94	59
LCS 600-280581/2-A	Lab Control Sample	72	50	63	60	99	52
LCSD 600-280581/3-A	Lab Control Sample Dup	69	50	59	57	99	51
MB 600-280581/1-A	Method Blank	110	91	98	60	129	100

Surrogate Legend

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

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(10-150)	(10-150)
600-195874-1	CBPSB11010206	75	112
600-195874-1 MS	CBPSB11010206	128	185 X
600-195874-1 MSD	CBPSB11010206	99	136
600-195874-2	CBPSB11020206	53	85
LCS 600-281609/2-A	Lab Control Sample	55 *	103 *
MB 600-281609/1-A	Method Blank	38 *	80 *

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 600-280650/6
Matrix: Water
Analysis Batch: 280650

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L			11/19/19 01:30	1
Benzene	ND		5.00		ug/L			11/19/19 01:30	1
Bromoform	ND		5.00		ug/L			11/19/19 01:30	1
Bromomethane	ND		10.0		ug/L			11/19/19 01:30	1
2-Butanone (MEK)	ND		10.0		ug/L			11/19/19 01:30	1
Carbon disulfide	ND		10.0		ug/L			11/19/19 01:30	1
Carbon tetrachloride	ND		5.00		ug/L			11/19/19 01:30	1
Chlorobenzene	ND		5.00		ug/L			11/19/19 01:30	1
Chlorobromomethane	ND		5.00		ug/L			11/19/19 01:30	1
Chloroethane	ND		10.0		ug/L			11/19/19 01:30	1
Chloroform	ND		10.0		ug/L			11/19/19 01:30	1
Chloromethane	ND		10.0		ug/L			11/19/19 01:30	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 01:30	1
Dibromochloromethane	ND		5.00		ug/L			11/19/19 01:30	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 01:30	1
1,1-Dichloroethane	ND		5.00		ug/L			11/19/19 01:30	1
1,2-Dichloroethane	ND		5.00		ug/L			11/19/19 01:30	1
1,1-Dichloroethene	ND		5.00		ug/L			11/19/19 01:30	1
1,2-Dichloropropane	ND		5.00		ug/L			11/19/19 01:30	1
Ethylbenzene	ND		5.00		ug/L			11/19/19 01:30	1
2-Hexanone	ND		10.0		ug/L			11/19/19 01:30	1
Methylene Chloride	ND		10.0		ug/L			11/19/19 01:30	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/19/19 01:30	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/19/19 01:30	1
o-Xylene	ND		5.00		ug/L			11/19/19 01:30	1
Styrene	ND		5.00		ug/L			11/19/19 01:30	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/19/19 01:30	1
Tetrachloroethene	ND		5.00		ug/L			11/19/19 01:30	1
Bromodichloromethane	ND		5.00		ug/L			11/19/19 01:30	1
Toluene	ND		5.00		ug/L			11/19/19 01:30	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 01:30	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/19/19 01:30	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 01:30	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/19/19 01:30	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/19/19 01:30	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/19/19 01:30	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/19/19 01:30	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/19/19 01:30	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/19/19 01:30	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/19/19 01:30	1
Trichloroethene	ND		5.00		ug/L			11/19/19 01:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/19/19 01:30	1
1,2-Dibromoethane	ND		5.00		ug/L			11/19/19 01:30	1
Isopropylbenzene	ND		5.00		ug/L			11/19/19 01:30	1
Vinyl acetate	ND		10.0		ug/L			11/19/19 01:30	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/19/19 01:30	1
Vinyl chloride	ND		5.00		ug/L			11/19/19 01:30	1
Cyclohexane	ND		5.00		ug/L			11/19/19 01:30	1

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

Lab Sample ID: MB 600-280650/6
Matrix: Water
Analysis Batch: 280650

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		5.00		ug/L			11/19/19 01:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*77*		*62 - 130*		*11/19/19 01:30*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*11/19/19 01:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*66*		*50 - 134*		*11/19/19 01:30*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*11/19/19 01:30*	*1*

Lab Sample ID: LCS 600-280650/4
Matrix: Water
Analysis Batch: 280650

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	84.51		ug/L		85	21 - 148
Benzene	50.0	48.13		ug/L		96	70 - 131
Bromoform	50.0	45.07		ug/L		90	67 - 134
Bromomethane	50.0	60.26		ug/L		121	45 - 150
2-Butanone (MEK)	100	90.15		ug/L		90	34 - 140
Carbon disulfide	50.0	53.21		ug/L		106	60 - 146
Carbon tetrachloride	50.0	46.38		ug/L		93	68 - 140
Chlorobenzene	50.0	47.43		ug/L		95	70 - 130
Chlorobromomethane	50.0	46.74		ug/L		93	70 - 130
Chloroethane	50.0	65.38		ug/L		131	65 - 138
Chloroform	50.0	43.54		ug/L		87	70 - 131
Chloromethane	50.0	43.64		ug/L		87	15 - 150
cis-1,2-Dichloroethene	50.0	46.19		ug/L		92	70 - 130
Dibromochloromethane	50.0	45.56		ug/L		91	70 - 130
cis-1,3-Dichloropropene	50.0	43.90		ug/L		88	66 - 130
1,1-Dichloroethane	50.0	46.46		ug/L		93	70 - 137
1,2-Dichloroethane	50.0	41.46		ug/L		83	62 - 144
1,1-Dichloroethene	50.0	55.09		ug/L		110	67 - 134
1,2-Dichloropropane	50.0	47.68		ug/L		95	70 - 133
Ethylbenzene	50.0	47.80		ug/L		96	70 - 130
2-Hexanone	100	95.47		ug/L		95	46 - 139
Methylene Chloride	50.0	46.19		ug/L		92	67 - 130
4-Methyl-2-pentanone (MIBK)	100	96.65		ug/L		97	39 - 150
m-Xylene & p-Xylene	50.0	46.94		ug/L		94	70 - 130
o-Xylene	50.0	45.94		ug/L		92	69 - 130
Styrene	50.0	48.01		ug/L		96	70 - 130
1,1,2,2-Tetrachloroethane	50.0	42.74		ug/L		85	62 - 130
Tetrachloroethene	50.0	50.47		ug/L		101	57 - 130
Bromodichloromethane	50.0	44.24		ug/L		88	70 - 130
Toluene	50.0	47.60		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	47.96		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.74		ug/L		95	39 - 150
trans-1,3-Dichloropropene	50.0	44.09		ug/L		88	70 - 138
1,2,4-Trichlorobenzene	50.0	46.46		ug/L		93	33 - 144
1,2-Dichlorobenzene	50.0	45.66		ug/L		91	69 - 130

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

Lab Sample ID: LCS 600-280650/4
Matrix: Water
Analysis Batch: 280650

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	50.0	45.11		ug/L		90	67 - 139
1,3-Dichlorobenzene	50.0	45.89		ug/L		92	70 - 130
1,1,2-Trichloroethane	50.0	45.37		ug/L		91	70 - 130
1,4-Dichlorobenzene	50.0	45.42		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	39.49		ug/L		79	10 - 150
Trichloroethene	50.0	48.56		ug/L		97	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.60		ug/L		101	39 - 150
1,2-Dibromoethane	50.0	44.53		ug/L		89	70 - 130
Isopropylbenzene	50.0	45.76		ug/L		92	70 - 130
Vinyl acetate	100	68.79		ug/L		69	22 - 150
Methyl tert-butyl ether	50.0	43.97		ug/L		88	63 - 134
Vinyl chloride	50.0	42.88		ug/L		86	55 - 150
Cyclohexane	50.0	50.02		ug/L		100	10 - 150
Xylenes, Total	100	92.88		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*92*		*62 - 130*
4-Bromofluorobenzene	*91*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 600-280650/5
Matrix: Water
Analysis Batch: 280650

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	94.26		ug/L		94	21 - 148	11	20
Benzene	50.0	53.93		ug/L		108	70 - 131	11	20
Bromoform	50.0	49.50		ug/L		99	67 - 134	9	20
Bromomethane	50.0	59.77		ug/L		120	45 - 150	1	20
2-Butanone (MEK)	100	96.70		ug/L		97	34 - 140	7	20
Carbon disulfide	50.0	58.96		ug/L		118	60 - 146	10	20
Carbon tetrachloride	50.0	53.19		ug/L		106	68 - 140	14	20
Chlorobenzene	50.0	52.96		ug/L		106	70 - 130	11	20
Chlorobromomethane	50.0	51.68		ug/L		103	70 - 130	10	20
Chloroethane	50.0	66.79		ug/L		134	65 - 138	2	20
Chloroform	50.0	47.96		ug/L		96	70 - 131	10	20
Chloromethane	50.0	44.66		ug/L		89	15 - 150	2	20
cis-1,2-Dichloroethene	50.0	51.75		ug/L		103	70 - 130	11	20
Dibromochloromethane	50.0	50.63		ug/L		101	70 - 130	11	20
cis-1,3-Dichloropropene	50.0	50.87		ug/L		102	66 - 130	15	20
1,1-Dichloroethane	50.0	52.29		ug/L		105	70 - 137	12	20
1,2-Dichloroethane	50.0	46.32		ug/L		93	62 - 144	11	20
1,1-Dichloroethene	50.0	59.91		ug/L		120	67 - 134	8	20
1,2-Dichloropropane	50.0	53.47		ug/L		107	70 - 133	11	20
Ethylbenzene	50.0	52.47		ug/L		105	70 - 130	9	20
2-Hexanone	100	106.9		ug/L		107	46 - 139	11	20
Methylene Chloride	50.0	50.86		ug/L		102	67 - 130	10	20

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

Lab Sample ID: LCSD 600-280650/5
Matrix: Water
Analysis Batch: 280650

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	100	106.6		ug/L		107	39 - 150	10	20
m-Xylene & p-Xylene	50.0	51.87		ug/L		104	70 - 130	10	20
o-Xylene	50.0	52.32		ug/L		105	69 - 130	13	20
Styrene	50.0	54.38		ug/L		109	70 - 130	12	20
1,1,2,2-Tetrachloroethane	50.0	45.61		ug/L		91	62 - 130	7	20
Tetrachloroethene	50.0	57.36		ug/L		115	57 - 130	13	20
Bromodichloromethane	50.0	49.80		ug/L		100	70 - 130	12	20
Toluene	50.0	53.32		ug/L		107	70 - 130	11	20
trans-1,2-Dichloroethene	50.0	53.72		ug/L		107	70 - 130	11	20
1,2-Dibromo-3-Chloropropane	50.0	51.66		ug/L		103	39 - 150	8	20
trans-1,3-Dichloropropene	50.0	48.30		ug/L		97	70 - 138	9	20
1,2,4-Trichlorobenzene	50.0	53.01		ug/L		106	33 - 144	13	20
1,2-Dichlorobenzene	50.0	50.91		ug/L		102	69 - 130	11	20
1,1,1-Trichloroethane	50.0	50.01		ug/L		100	67 - 139	10	20
1,3-Dichlorobenzene	50.0	51.66		ug/L		103	70 - 130	12	20
1,1,2-Trichloroethane	50.0	50.51		ug/L		101	70 - 130	11	20
1,4-Dichlorobenzene	50.0	50.08		ug/L		100	70 - 130	10	20
Dichlorodifluoromethane	50.0	42.06		ug/L		84	10 - 150	6	20
Trichloroethene	50.0	55.21		ug/L		110	70 - 130	13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.66		ug/L		113	39 - 150	11	20
1,2-Dibromoethane	50.0	50.60		ug/L		101	70 - 130	13	20
Isopropylbenzene	50.0	50.38		ug/L		101	70 - 130	10	20
Vinyl acetate	100	106.9	*	ug/L		107	22 - 150	43	20
Methyl tert-butyl ether	50.0	49.82		ug/L		100	63 - 134	12	20
Vinyl chloride	50.0	43.46		ug/L		87	55 - 150	1	20
Cyclohexane	50.0	56.82		ug/L		114	10 - 150	13	20
Xylenes, Total	100	104.2		ug/L		104	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane	*102*		*62 - 130*
4-Bromofluorobenzene	*101*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*
Toluene-d8 (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 600-280696/7
Matrix: Water
Analysis Batch: 280696

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L			11/19/19 15:56	1
Benzene	ND		5.00		ug/L			11/19/19 15:56	1
Bromoform	ND		5.00		ug/L			11/19/19 15:56	1
Bromomethane	ND		10.0		ug/L			11/19/19 15:56	1
2-Butanone (MEK)	ND		10.0		ug/L			11/19/19 15:56	1
Carbon disulfide	ND		10.0		ug/L			11/19/19 15:56	1
Carbon tetrachloride	ND		5.00		ug/L			11/19/19 15:56	1
Chlorobenzene	ND		5.00		ug/L			11/19/19 15:56	1
Chlorobromomethane	ND		5.00		ug/L			11/19/19 15:56	1

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

Lab Sample ID: MB 600-280696/7
Matrix: Water
Analysis Batch: 280696

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		10.0		ug/L			11/19/19 15:56	1
Chloroform	ND		10.0		ug/L			11/19/19 15:56	1
Chloromethane	ND		10.0		ug/L			11/19/19 15:56	1
cis-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 15:56	1
Dibromochloromethane	ND		5.00		ug/L			11/19/19 15:56	1
cis-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 15:56	1
1,1-Dichloroethane	ND		5.00		ug/L			11/19/19 15:56	1
1,2-Dichloroethane	ND		5.00		ug/L			11/19/19 15:56	1
1,1-Dichloroethene	ND		5.00		ug/L			11/19/19 15:56	1
1,2-Dichloropropane	ND		5.00		ug/L			11/19/19 15:56	1
Ethylbenzene	ND		5.00		ug/L			11/19/19 15:56	1
2-Hexanone	ND		10.0		ug/L			11/19/19 15:56	1
Methylene Chloride	ND		10.0		ug/L			11/19/19 15:56	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			11/19/19 15:56	1
m-Xylene & p-Xylene	ND		5.00		ug/L			11/19/19 15:56	1
o-Xylene	ND		5.00		ug/L			11/19/19 15:56	1
Styrene	ND		5.00		ug/L			11/19/19 15:56	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/L			11/19/19 15:56	1
Tetrachloroethene	ND		5.00		ug/L			11/19/19 15:56	1
Bromodichloromethane	ND		5.00		ug/L			11/19/19 15:56	1
Toluene	ND		5.00		ug/L			11/19/19 15:56	1
trans-1,2-Dichloroethene	ND		5.00		ug/L			11/19/19 15:56	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			11/19/19 15:56	1
trans-1,3-Dichloropropene	ND		5.00		ug/L			11/19/19 15:56	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L			11/19/19 15:56	1
1,2-Dichlorobenzene	ND		5.00		ug/L			11/19/19 15:56	1
1,1,1-Trichloroethane	ND		5.00		ug/L			11/19/19 15:56	1
1,3-Dichlorobenzene	ND		5.00		ug/L			11/19/19 15:56	1
1,1,2-Trichloroethane	ND		5.00		ug/L			11/19/19 15:56	1
1,4-Dichlorobenzene	ND		5.00		ug/L			11/19/19 15:56	1
Dichlorodifluoromethane	ND		5.00		ug/L			11/19/19 15:56	1
Trichloroethene	ND		5.00		ug/L			11/19/19 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/L			11/19/19 15:56	1
1,2-Dibromoethane	ND		5.00		ug/L			11/19/19 15:56	1
Isopropylbenzene	ND		5.00		ug/L			11/19/19 15:56	1
Vinyl acetate	ND		10.0		ug/L			11/19/19 15:56	1
Methyl tert-butyl ether	ND		5.00		ug/L			11/19/19 15:56	1
Vinyl chloride	ND		5.00		ug/L			11/19/19 15:56	1
Cyclohexane	ND		5.00		ug/L			11/19/19 15:56	1
Xylenes, Total	ND		5.00		ug/L			11/19/19 15:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*74*		*62 - 130*		*11/19/19 15:56*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*11/19/19 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*67*		*50 - 134*		*11/19/19 15:56*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*11/19/19 15:56*	*1*

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

Lab Sample ID: LCS 600-280696/4
Matrix: Water
Analysis Batch: 280696

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	83.31		ug/L		83	21 - 148
Benzene	50.0	46.21		ug/L		92	70 - 131
Bromoform	50.0	43.92		ug/L		88	67 - 134
Bromomethane	50.0	59.53		ug/L		119	45 - 150
2-Butanone (MEK)	100	86.19		ug/L		86	34 - 140
Carbon disulfide	50.0	44.15		ug/L		88	60 - 146
Carbon tetrachloride	50.0	44.79		ug/L		90	68 - 140
Chlorobenzene	50.0	44.76		ug/L		90	70 - 130
Chlorobromomethane	50.0	47.72		ug/L		95	70 - 130
Chloroethane	50.0	66.80		ug/L		134	65 - 138
Chloroform	50.0	42.52		ug/L		85	70 - 131
Chloromethane	50.0	42.25		ug/L		85	15 - 150
cis-1,2-Dichloroethene	50.0	46.22		ug/L		92	70 - 130
Dibromochloromethane	50.0	43.36		ug/L		87	70 - 130
cis-1,3-Dichloropropene	50.0	44.06		ug/L		88	66 - 130
1,1-Dichloroethane	50.0	46.69		ug/L		93	70 - 137
1,2-Dichloroethane	50.0	41.91		ug/L		84	62 - 144
1,1-Dichloroethene	50.0	44.79		ug/L		90	67 - 134
1,2-Dichloropropane	50.0	46.52		ug/L		93	70 - 133
Ethylbenzene	50.0	43.95		ug/L		88	70 - 130
2-Hexanone	100	93.35		ug/L		93	46 - 139
Methylene Chloride	50.0	41.96		ug/L		84	67 - 130
4-Methyl-2-pentanone (MIBK)	100	94.15		ug/L		94	39 - 150
m-Xylene & p-Xylene	50.0	44.58		ug/L		89	70 - 130
o-Xylene	50.0	44.47		ug/L		89	69 - 130
Styrene	50.0	46.88		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	41.09		ug/L		82	62 - 130
Tetrachloroethene	50.0	48.73		ug/L		97	57 - 130
Bromodichloromethane	50.0	43.76		ug/L		88	70 - 130
Toluene	50.0	44.03		ug/L		88	70 - 130
trans-1,2-Dichloroethene	50.0	46.78		ug/L		94	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.27		ug/L		89	39 - 150
trans-1,3-Dichloropropene	50.0	43.11		ug/L		86	70 - 138
1,2,4-Trichlorobenzene	50.0	46.10		ug/L		92	33 - 144
1,2-Dichlorobenzene	50.0	42.15		ug/L		84	69 - 130
1,1,1-Trichloroethane	50.0	43.50		ug/L		87	67 - 139
1,3-Dichlorobenzene	50.0	43.37		ug/L		87	70 - 130
1,1,2-Trichloroethane	50.0	44.96		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	41.93		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	39.93		ug/L		80	10 - 150
Trichloroethene	50.0	47.44		ug/L		95	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.90		ug/L		96	39 - 150
1,2-Dibromoethane	50.0	43.56		ug/L		87	70 - 130
Isopropylbenzene	50.0	45.34		ug/L		91	70 - 130
Vinyl acetate	100	96.26		ug/L		96	22 - 150
Methyl tert-butyl ether	50.0	45.54		ug/L		91	63 - 134
Vinyl chloride	50.0	44.37		ug/L		89	55 - 150
Cyclohexane	50.0	46.50		ug/L		93	10 - 150

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

Lab Sample ID: LCS 600-280696/4
Matrix: Water
Analysis Batch: 280696

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			100	89.05		ug/L		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*88*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*
Toluene-d8 (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 600-280696/5
Matrix: Water
Analysis Batch: 280696

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	87.18		ug/L		87	21 - 148	5	20
Benzene			50.0	45.24		ug/L		90	70 - 131	2	20
Bromoform			50.0	45.99		ug/L		92	67 - 134	5	20
Bromomethane			50.0	61.09		ug/L		122	45 - 150	3	20
2-Butanone (MEK)			100	92.15		ug/L		92	34 - 140	7	20
Carbon disulfide			50.0	44.17		ug/L		88	60 - 146	0	20
Carbon tetrachloride			50.0	42.78		ug/L		86	68 - 140	5	20
Chlorobenzene			50.0	43.80		ug/L		88	70 - 130	2	20
Chlorobromomethane			50.0	45.87		ug/L		92	70 - 130	4	20
Chloroethane			50.0	69.77	*	ug/L		140	65 - 138	4	20
Chloroform			50.0	41.29		ug/L		83	70 - 131	3	20
Chloromethane			50.0	45.68		ug/L		91	15 - 150	8	20
cis-1,2-Dichloroethene			50.0	44.23		ug/L		88	70 - 130	4	20
Dibromochloromethane			50.0	44.15		ug/L		88	70 - 130	2	20
cis-1,3-Dichloropropene			50.0	43.32		ug/L		87	66 - 130	2	20
1,1-Dichloroethane			50.0	45.29		ug/L		91	70 - 137	3	20
1,2-Dichloroethane			50.0	41.40		ug/L		83	62 - 144	1	20
1,1-Dichloroethene			50.0	43.01		ug/L		86	67 - 134	4	20
1,2-Dichloropropane			50.0	46.49		ug/L		93	70 - 133	0	20
Ethylbenzene			50.0	43.64		ug/L		87	70 - 130	1	20
2-Hexanone			100	96.93		ug/L		97	46 - 139	4	20
Methylene Chloride			50.0	41.40		ug/L		83	67 - 130	1	20
4-Methyl-2-pentanone (MIBK)			100	96.54		ug/L		97	39 - 150	3	20
m-Xylene & p-Xylene			50.0	43.87		ug/L		88	70 - 130	2	20
o-Xylene			50.0	43.64		ug/L		87	69 - 130	2	20
Styrene			50.0	45.76		ug/L		92	70 - 130	2	20
1,1,2,2-Tetrachloroethane			50.0	41.84		ug/L		84	62 - 130	2	20
Tetrachloroethene			50.0	48.13		ug/L		96	57 - 130	1	20
Bromodichloromethane			50.0	43.48		ug/L		87	70 - 130	1	20
Toluene			50.0	44.80		ug/L		90	70 - 130	2	20
trans-1,2-Dichloroethene			50.0	43.86		ug/L		88	70 - 130	6	20
1,2-Dibromo-3-Chloropropane			50.0	45.05		ug/L		90	39 - 150	2	20
trans-1,3-Dichloropropene			50.0	43.47		ug/L		87	70 - 138	1	20
1,2,4-Trichlorobenzene			50.0	45.49		ug/L		91	33 - 144	1	20
1,2-Dichlorobenzene			50.0	44.10		ug/L		88	69 - 130	5	20

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

Lab Sample ID: LCSD 600-280696/5
Matrix: Water
Analysis Batch: 280696

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	40.57		ug/L		81	67 - 139	7	20
1,3-Dichlorobenzene			50.0	43.62		ug/L		87	70 - 130	1	20
1,1,2-Trichloroethane			50.0	45.04		ug/L		90	70 - 130	0	20
1,4-Dichlorobenzene			50.0	42.84		ug/L		86	70 - 130	2	20
Dichlorodifluoromethane			50.0	41.43		ug/L		83	10 - 150	4	20
Trichloroethene			50.0	45.16		ug/L		90	70 - 130	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	49.12		ug/L		98	39 - 150	3	20
1,2-Dibromoethane			50.0	43.38		ug/L		87	70 - 130	0	20
Isopropylbenzene			50.0	42.67		ug/L		85	70 - 130	6	20
Vinyl acetate			100	96.47		ug/L		96	22 - 150	0	20
Methyl tert-butyl ether			50.0	43.41		ug/L		87	63 - 134	5	20
Vinyl chloride			50.0	46.88		ug/L		94	55 - 150	5	20
Cyclohexane			50.0	44.74		ug/L		89	10 - 150	4	20
Xylenes, Total			100	87.51		ug/L		88	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane	*87*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*
Toluene-d8 (Surr)	*89*		*70 - 130*

Lab Sample ID: MB 600-281190/6
Matrix: Solid
Analysis Batch: 281190

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/Kg			11/24/19 20:17	1
Benzene	ND		5.00		ug/Kg			11/24/19 20:17	1
Bromoform	ND		5.00		ug/Kg			11/24/19 20:17	1
Bromomethane	ND		10.0		ug/Kg			11/24/19 20:17	1
2-Butanone (MEK)	ND		10.0		ug/Kg			11/24/19 20:17	1
Carbon disulfide	ND		10.0		ug/Kg			11/24/19 20:17	1
Carbon tetrachloride	ND		5.00		ug/Kg			11/24/19 20:17	1
Chlorobenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
Chlorobromomethane	ND		5.00		ug/Kg			11/24/19 20:17	1
Chloroethane	ND		10.0		ug/Kg			11/24/19 20:17	1
Chloroform	ND		10.0		ug/Kg			11/24/19 20:17	1
Chloromethane	ND		10.0		ug/Kg			11/24/19 20:17	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg			11/24/19 20:17	1
Dibromochloromethane	ND		5.00		ug/Kg			11/24/19 20:17	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1-Dichloroethane	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2-Dichloroethane	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1-Dichloroethene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2-Dichloropropane	ND		5.00		ug/Kg			11/24/19 20:17	1
Ethylbenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
2-Hexanone	ND		10.0		ug/Kg			11/24/19 20:17	1
Methylene Chloride	ND		10.0		ug/Kg			11/24/19 20:17	1

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

Lab Sample ID: MB 600-281190/6
Matrix: Solid
Analysis Batch: 281190

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg			11/24/19 20:17	1
m-Xylene & p-Xylene	ND		5.00		ug/Kg			11/24/19 20:17	1
o-Xylene	ND		5.00		ug/Kg			11/24/19 20:17	1
Styrene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg			11/24/19 20:17	1
Tetrachloroethene	ND		5.00		ug/Kg			11/24/19 20:17	1
Bromodichloromethane	ND		5.00		ug/Kg			11/24/19 20:17	1
Toluene	ND		5.00		ug/Kg			11/24/19 20:17	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/Kg			11/24/19 20:17	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg			11/24/19 20:17	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1,2-Trichloroethane	ND		40.0		ug/Kg			11/24/19 20:17	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
Dichlorodifluoromethane	ND		5.00		ug/Kg			11/24/19 20:17	1
Trichloroethene	ND		5.00		ug/Kg			11/24/19 20:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00		ug/Kg			11/24/19 20:17	1
1,2-Dibromoethane	ND		5.00		ug/Kg			11/24/19 20:17	1
Isopropylbenzene	ND		5.00		ug/Kg			11/24/19 20:17	1
Vinyl acetate	ND		10.0		ug/Kg			11/24/19 20:17	1
Methyl tert-butyl ether	ND		5.00		ug/Kg			11/24/19 20:17	1
Vinyl chloride	ND		10.0		ug/Kg			11/24/19 20:17	1
Cyclohexane	ND		5.00		ug/Kg			11/24/19 20:17	1
Xylenes, Total	ND		5.00		ug/Kg			11/24/19 20:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*117*		*68 - 140*		*11/24/19 20:17*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*		*11/24/19 20:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*61 - 130*		*11/24/19 20:17*	*1*
Toluene-d8 (Surr)	*111*		*50 - 130*		*11/24/19 20:17*	*1*

Lab Sample ID: LCS 600-281190/3
Matrix: Solid
Analysis Batch: 281190

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	83.87		ug/Kg		84	13 - 150
Benzene	50.0	49.66		ug/Kg		99	70 - 131
Bromoform	50.0	42.66		ug/Kg		85	43 - 150
Bromomethane	50.0	55.24		ug/Kg		110	37 - 147
2-Butanone (MEK)	100	76.94		ug/Kg		77	33 - 150
Carbon disulfide	50.0	49.76		ug/Kg		100	51 - 141
Carbon tetrachloride	50.0	50.72		ug/Kg		101	58 - 130
Chlorobenzene	50.0	49.82		ug/Kg		100	63 - 131
Chlorobromomethane	50.0	46.26		ug/Kg		93	70 - 132

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

Lab Sample ID: LCS 600-281190/3
Matrix: Solid
Analysis Batch: 281190

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	55.55		ug/Kg		111	40 - 150
Chloroform	50.0	49.11		ug/Kg		98	69 - 130
Chloromethane	50.0	51.58		ug/Kg		103	44 - 141
cis-1,2-Dichloroethene	50.0	49.71		ug/Kg		99	70 - 130
Dibromochloromethane	50.0	47.26		ug/Kg		95	65 - 134
cis-1,3-Dichloropropene	50.0	49.69		ug/Kg		99	65 - 130
1,1-Dichloroethane	50.0	51.40		ug/Kg		103	63 - 140
1,2-Dichloroethane	50.0	47.93		ug/Kg		96	58 - 137
1,1-Dichloroethene	50.0	50.24		ug/Kg		100	62 - 142
1,2-Dichloropropane	50.0	50.85		ug/Kg		102	70 - 130
Ethylbenzene	50.0	50.72		ug/Kg		101	66 - 130
2-Hexanone	100	86.32		ug/Kg		86	35 - 150
Methylene Chloride	50.0	46.17		ug/Kg		92	61 - 150
4-Methyl-2-pentanone (MIBK)	100	82.15		ug/Kg		82	21 - 150
m-Xylene & p-Xylene	50.0	50.71		ug/Kg		101	64 - 130
o-Xylene	50.0	51.50		ug/Kg		103	62 - 130
Styrene	50.0	51.82		ug/Kg		104	65 - 133
1,1,2,2-Tetrachloroethane	50.0	43.08		ug/Kg		86	61 - 138
Tetrachloroethene	50.0	48.48		ug/Kg		97	43 - 143
Bromodichloromethane	50.0	51.35		ug/Kg		103	67 - 138
Toluene	50.0	50.39		ug/Kg		101	67 - 130
trans-1,2-Dichloroethene	50.0	50.56		ug/Kg		101	69 - 130
1,2-Dibromo-3-Chloropropane	50.0	39.21		ug/Kg		78	29 - 150
trans-1,3-Dichloropropene	50.0	49.51		ug/Kg		99	70 - 130
1,2,4-Trichlorobenzene	50.0	48.40		ug/Kg		97	53 - 136
1,2-Dichlorobenzene	50.0	49.67		ug/Kg		99	61 - 131
1,1,1-Trichloroethane	50.0	50.74		ug/Kg		101	59 - 130
1,3-Dichlorobenzene	50.0	50.42		ug/Kg		101	63 - 132
1,1,2-Trichloroethane	50.0	45.10		ug/Kg		90	67 - 134
1,4-Dichlorobenzene	50.0	48.98		ug/Kg		98	65 - 131
Dichlorodifluoromethane	50.0	50.90		ug/Kg		102	24 - 147
Trichloroethene	50.0	49.60		ug/Kg		99	63 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.12		ug/Kg		96	48 - 150
1,2-Dibromoethane	50.0	45.38		ug/Kg		91	65 - 136
Isopropylbenzene	50.0	50.66		ug/Kg		101	64 - 131
Vinyl acetate	100	95.47		ug/Kg		95	40 - 150
Methyl tert-butyl ether	50.0	45.74		ug/Kg		91	63 - 132
Vinyl chloride	50.0	50.03		ug/Kg		100	40 - 148
Cyclohexane	50.0	49.63		ug/Kg		99	54 - 130
Xylenes, Total	100	102.2		ug/Kg		102	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*113*		*68 - 140*
4-Bromofluorobenzene	*113*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*
Toluene-d8 (Surr)	*112*		*50 - 130*

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

Lab Sample ID: LCSD 600-281190/4
Matrix: Solid
Analysis Batch: 281190

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	85.12		ug/Kg		85	13 - 150	1	30
Benzene			50.0	48.30		ug/Kg		97	70 - 131	3	30
Bromoform			50.0	46.11		ug/Kg		92	43 - 150	8	30
Bromomethane			50.0	50.63		ug/Kg		101	37 - 147	9	30
2-Butanone (MEK)			100	89.16		ug/Kg		89	33 - 150	15	30
Carbon disulfide			50.0	48.66		ug/Kg		97	51 - 141	2	30
Carbon tetrachloride			50.0	49.38		ug/Kg		99	58 - 130	3	30
Chlorobenzene			50.0	49.20		ug/Kg		98	63 - 131	1	30
Chlorobromomethane			50.0	47.00		ug/Kg		94	70 - 132	2	30
Chloroethane			50.0	51.63		ug/Kg		103	40 - 150	7	30
Chloroform			50.0	49.25		ug/Kg		99	69 - 130	0	30
Chloromethane			50.0	47.70		ug/Kg		95	44 - 141	8	30
cis-1,2-Dichloroethene			50.0	48.76		ug/Kg		98	70 - 130	2	30
Dibromochloromethane			50.0	48.73		ug/Kg		97	65 - 134	3	30
cis-1,3-Dichloropropene			50.0	50.00		ug/Kg		100	65 - 130	1	30
1,1-Dichloroethane			50.0	49.26		ug/Kg		99	63 - 140	4	30
1,2-Dichloroethane			50.0	49.36		ug/Kg		99	58 - 137	3	30
1,1-Dichloroethene			50.0	48.83		ug/Kg		98	62 - 142	3	30
1,2-Dichloropropane			50.0	50.80		ug/Kg		102	70 - 130	0	30
Ethylbenzene			50.0	50.52		ug/Kg		101	66 - 130	0	30
2-Hexanone			100	97.74		ug/Kg		98	35 - 150	12	30
Methylene Chloride			50.0	44.23		ug/Kg		88	61 - 150	4	30
4-Methyl-2-pentanone (MIBK)			100	93.71		ug/Kg		94	21 - 150	13	30
m-Xylene & p-Xylene			50.0	48.30		ug/Kg		97	64 - 130	5	30
o-Xylene			50.0	50.02		ug/Kg		100	62 - 130	3	30
Styrene			50.0	50.45		ug/Kg		101	65 - 133	3	30
1,1,2,2-Tetrachloroethane			50.0	46.12		ug/Kg		92	61 - 138	7	30
Tetrachloroethene			50.0	48.09		ug/Kg		96	43 - 143	1	30
Bromodichloromethane			50.0	50.57		ug/Kg		101	67 - 138	2	30
Toluene			50.0	49.25		ug/Kg		99	67 - 130	2	30
trans-1,2-Dichloroethene			50.0	47.30		ug/Kg		95	69 - 130	7	30
1,2-Dibromo-3-Chloropropane			50.0	46.10		ug/Kg		92	29 - 150	16	30
trans-1,3-Dichloropropene			50.0	49.17		ug/Kg		98	70 - 130	1	30
1,2,4-Trichlorobenzene			50.0	49.91		ug/Kg		100	53 - 136	3	30
1,2-Dichlorobenzene			50.0	49.52		ug/Kg		99	61 - 131	0	30
1,1,1-Trichloroethane			50.0	50.08		ug/Kg		100	59 - 130	1	30
1,3-Dichlorobenzene			50.0	50.08		ug/Kg		100	63 - 132	1	30
1,1,2-Trichloroethane			50.0	47.24		ug/Kg		94	67 - 134	5	30
1,4-Dichlorobenzene			50.0	48.51		ug/Kg		97	65 - 131	1	30
Dichlorodifluoromethane			50.0	46.34		ug/Kg		93	24 - 147	9	30
Trichloroethene			50.0	47.71		ug/Kg		95	63 - 135	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	47.12		ug/Kg		94	48 - 150	2	30
1,2-Dibromoethane			50.0	47.15		ug/Kg		94	65 - 136	4	30
Isopropylbenzene			50.0	47.94		ug/Kg		96	64 - 131	6	30
Vinyl acetate			100	103.7		ug/Kg		104	40 - 150	8	30
Methyl tert-butyl ether			50.0	44.29		ug/Kg		89	63 - 132	3	30
Vinyl chloride			50.0	45.38		ug/Kg		91	40 - 148	10	30
Cyclohexane			50.0	46.30		ug/Kg		93	54 - 130	7	30

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

Lab Sample ID: LCSD 600-281190/4
Matrix: Solid
Analysis Batch: 281190

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total			100	98.32		ug/Kg		98	63 - 130	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane	*115*		*68 - 140*
4-Bromofluorobenzene	*111*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*
Toluene-d8 (Surr)	*105*		*50 - 130*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: MB 600-280581/1-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Acenaphthylene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Anthracene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Benzo[a]anthracene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Benzo[b]fluoranthene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Benzo[k]fluoranthene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Benzo[g,h,i]perylene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Benzo[a]pyrene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Bis(2-ethylhexyl) phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Butyl benzyl phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Chloroaniline	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Chloronaphthalene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Carbazole	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Chrysene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Di-n-butyl phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Dibenz(a,h)anthracene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Dibenzofuran	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
3,3'-Dichlorobenzidine	ND		20.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Diethyl phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Dimethyl phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4-Dinitrotoluene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,6-Dinitrotoluene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Di-n-octyl phthalate	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Fluoranthene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Fluorene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Hexachlorobenzene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Hexachloroethane	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Hexachlorobutadiene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Indeno[1,2,3-cd]pyrene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: MB 600-280581/1-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Methylnaphthalene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Naphthalene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Nitroaniline	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
3-Nitroaniline	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Nitroaniline	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Nitrobenzene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
N-Nitrosodiphenylamine	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Phenanthrene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Pyrene	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Chlorophenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Methylphenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
3 & 4 Methylphenol	ND		20.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4-Dichlorophenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4-Dimethylphenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4,6-Dinitro-2-methylphenol	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4-Dinitrophenol	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2-Nitrophenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
4-Nitrophenol	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Pentachlorophenol	ND		50.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Phenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4,5-Trichlorophenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
bis (2-Chloroisopropyl) ether	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
1,1'-Biphenyl	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1
Acetophenone	ND		10.0		ug/L		11/18/19 10:38	11/19/19 12:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*110*		*24 - 150*	*11/18/19 10:38*	*11/19/19 12:22*	*1*
2-Fluorophenol	*91*		*10 - 130*	*11/18/19 10:38*	*11/19/19 12:22*	*1*
2-Fluorobiphenyl	*98*		*38 - 133*	*11/18/19 10:38*	*11/19/19 12:22*	*1*
2,4,6-Tribromophenol	*60*		*19 - 150*	*11/18/19 10:38*	*11/19/19 12:22*	*1*
Terphenyl-d14	*129*		*35 - 150*	*11/18/19 10:38*	*11/19/19 12:22*	*1*
Phenol-d5 (Surr)	*100*		*10 - 130*	*11/18/19 10:38*	*11/19/19 12:22*	*1*

Lab Sample ID: LCS 600-280581/2-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	27.47		ug/L		69	42 - 130
Acenaphthylene	40.0	26.53		ug/L		66	41 - 130
Anthracene	40.0	35.62		ug/L		89	48 - 130
Benzo[a]anthracene	40.0	43.84		ug/L		110	47 - 130
Benzo[b]fluoranthene	40.0	46.67		ug/L		117	47 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-280581/2-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[k]fluoranthene	40.0	49.55		ug/L		124	44 - 131
Benzo[g,h,i]perylene	40.0	45.42		ug/L		114	42 - 138
Benzo[a]pyrene	40.0	39.91		ug/L		100	52 - 130
Bis(2-chloroethoxy)methane	40.0	31.39		ug/L		78	42 - 130
Bis(2-chloroethyl)ether	40.0	29.61		ug/L		74	35 - 130
Bis(2-ethylhexyl) phthalate	40.0	56.77	*	ug/L		142	34 - 139
4-Bromophenyl phenyl ether	40.0	27.75		ug/L		69	44 - 130
Butyl benzyl phthalate	40.0	56.28		ug/L		141	22 - 150
4-Chloroaniline	40.0	34.06		ug/L		85	19 - 130
2-Chloronaphthalene	40.0	26.83		ug/L		67	39 - 130
4-Chlorophenyl phenyl ether	40.0	27.55		ug/L		69	37 - 130
Carbazole	40.0	41.18		ug/L		103	49 - 130
Chrysene	40.0	44.30		ug/L		111	46 - 130
Di-n-butyl phthalate	40.0	47.03		ug/L		118	50 - 130
Dibenz(a,h)anthracene	40.0	44.72		ug/L		112	46 - 132
Dibenzofuran	40.0	28.48		ug/L		71	42 - 130
3,3'-Dichlorobenzidine	40.0	29.27		ug/L		73	10 - 150
Diethyl phthalate	40.0	37.74		ug/L		94	42 - 130
Dimethyl phthalate	40.0	33.55		ug/L		84	43 - 130
2,4-Dinitrotoluene	40.0	33.56		ug/L		84	48 - 130
2,6-Dinitrotoluene	40.0	28.72		ug/L		72	43 - 130
Di-n-octyl phthalate	40.0	53.10	*	ug/L		133	40 - 132
Fluoranthene	40.0	37.46		ug/L		94	52 - 130
Fluorene	40.0	29.47		ug/L		74	39 - 130
Hexachlorobenzene	40.0	25.07		ug/L		63	45 - 130
Hexachlorocyclopentadiene	40.0	10.95		ug/L		27	14 - 130
Hexachloroethane	40.0	27.89		ug/L		70	37 - 130
Hexachlorobutadiene	40.0	19.38		ug/L		48	35 - 130
Indeno[1,2,3-cd]pyrene	40.0	42.82		ug/L		107	38 - 132
Isophorone	40.0	31.23		ug/L		78	39 - 130
2-Methylnaphthalene	40.0	35.67		ug/L		89	40 - 130
Naphthalene	40.0	25.19		ug/L		63	41 - 130
2-Nitroaniline	40.0	46.04	J	ug/L		115	39 - 130
3-Nitroaniline	40.0	39.74	J	ug/L		99	33 - 130
4-Nitroaniline	40.0	38.65		ug/L		97	37 - 130
Nitrobenzene	40.0	41.65		ug/L		104	44 - 130
N-Nitrosodiphenylamine	40.0	30.23		ug/L		76	30 - 134
N-Nitrosodi-n-propylamine	40.0	33.38		ug/L		83	37 - 130
Phenanthrene	40.0	34.78		ug/L		87	47 - 130
Pyrene	40.0	42.33		ug/L		106	41 - 130
4-Chloro-3-methylphenol	40.0	33.27		ug/L		83	43 - 130
2-Chlorophenol	40.0	25.83		ug/L		65	36 - 130
2-Methylphenol	40.0	30.26		ug/L		76	37 - 130
3 & 4 Methylphenol	40.0	28.69		ug/L		72	39 - 130
2,4-Dichlorophenol	40.0	24.90		ug/L		62	41 - 130
2,4-Dimethylphenol	40.0	25.33		ug/L		63	32 - 130
4,6-Dinitro-2-methylphenol	80.0	76.83		ug/L		96	49 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-280581/2-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrophenol	80.0	47.67	J	ug/L		60	34 - 130
2-Nitrophenol	40.0	26.98		ug/L		67	43 - 130
4-Nitrophenol	80.0	70.14		ug/L		88	10 - 133
Pentachlorophenol	80.0	36.48	J	ug/L		46	34 - 130
Phenol	40.0	19.04		ug/L		48	21 - 130
2,4,5-Trichlorophenol	40.0	26.71		ug/L		67	39 - 130
2,4,6-Trichlorophenol	40.0	25.49		ug/L		64	36 - 130
bis (2-Chloroisopropyl) ether	40.0	33.55		ug/L		84	29 - 130
1,1'-Biphenyl	40.0	27.57		ug/L		69	37 - 130
Acetophenone	40.0	29.79		ug/L		74	39 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*72*		*24 - 150*
2-Fluorophenol	*50*		*10 - 130*
2-Fluorobiphenyl	*63*		*38 - 133*
2,4,6-Tribromophenol	*60*		*19 - 150*
Terphenyl-d14	*99*		*35 - 150*
Phenol-d5 (Surr)	*52*		*10 - 130*

Lab Sample ID: LCSD 600-280581/3-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 280581

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	40.0	26.73		ug/L		67	42 - 130	3	20
Acenaphthylene	40.0	26.81		ug/L		67	41 - 130	1	20
Anthracene	40.0	33.42		ug/L		84	48 - 130	6	20
Benzo[a]anthracene	40.0	43.27		ug/L		108	47 - 130	1	20
Benzo[b]fluoranthene	40.0	43.61		ug/L		109	47 - 130	7	20
Benzo[k]fluoranthene	40.0	51.22		ug/L		128	44 - 131	3	20
Benzo[g,h,i]perylene	40.0	43.82		ug/L		110	42 - 138	4	20
Benzo[a]pyrene	40.0	41.04		ug/L		103	52 - 130	3	20
Bis(2-chloroethoxy)methane	40.0	31.91		ug/L		80	42 - 130	2	20
Bis(2-chloroethyl)ether	40.0	27.45		ug/L		69	35 - 130	8	20
Bis(2-ethylhexyl) phthalate	40.0	58.69	*	ug/L		147	34 - 139	3	20
4-Bromophenyl phenyl ether	40.0	29.18		ug/L		73	44 - 130	5	20
Butyl benzyl phthalate	40.0	57.18		ug/L		143	22 - 150	2	20
4-Chloroaniline	40.0	32.44		ug/L		81	19 - 130	5	20
2-Chloronaphthalene	40.0	25.83		ug/L		65	39 - 130	4	20
4-Chlorophenyl phenyl ether	40.0	25.87		ug/L		65	37 - 130	6	20
Carbazole	40.0	41.82		ug/L		105	49 - 130	2	20
Chrysene	40.0	45.80		ug/L		115	46 - 130	3	20
Di-n-butyl phthalate	40.0	46.69		ug/L		117	50 - 130	1	20
Dibenz(a,h)anthracene	40.0	43.77		ug/L		109	46 - 132	2	20
Dibenzofuran	40.0	27.38		ug/L		68	42 - 130	4	20
3,3'-Dichlorobenzidine	40.0	30.84		ug/L		77	10 - 150	5	40
Diethyl phthalate	40.0	37.98		ug/L		95	42 - 130	1	20

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCSD 600-280581/3-A
Matrix: Water
Analysis Batch: 280712

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 280581

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dimethyl phthalate			40.0	33.64		ug/L		84	43 - 130	0	20
2,4-Dinitrotoluene			40.0	35.23		ug/L		88	48 - 130	5	20
2,6-Dinitrotoluene			40.0	28.69		ug/L		72	43 - 130	0	20
Di-n-octyl phthalate			40.0	54.81	*	ug/L		137	40 - 132	3	20
Fluoranthene			40.0	35.68		ug/L		89	52 - 130	5	20
Fluorene			40.0	29.11		ug/L		73	39 - 130	1	20
Hexachlorobenzene			40.0	24.63		ug/L		62	45 - 130	2	20
Hexachlorocyclopentadiene			40.0	11.45		ug/L		29	14 - 130	4	20
Hexachloroethane			40.0	28.76		ug/L		72	37 - 130	3	20
Hexachlorobutadiene			40.0	19.89		ug/L		50	35 - 130	3	20
Indeno[1,2,3-cd]pyrene			40.0	45.31		ug/L		113	38 - 132	6	20
Isophorone			40.0	31.53		ug/L		79	39 - 130	1	20
2-Methylnaphthalene			40.0	35.42		ug/L		89	40 - 130	1	20
Naphthalene			40.0	25.42		ug/L		64	41 - 130	1	20
2-Nitroaniline			40.0	47.02	J	ug/L		118	39 - 130	2	20
3-Nitroaniline			40.0	38.40	J	ug/L		96	33 - 130	3	20
4-Nitroaniline			40.0	35.63		ug/L		89	37 - 130	8	20
Nitrobenzene			40.0	41.82		ug/L		105	44 - 130	0	20
N-Nitrosodiphenylamine			40.0	31.71		ug/L		79	30 - 134	5	20
N-Nitrosodi-n-propylamine			40.0	33.09		ug/L		83	37 - 130	1	20
Phenanthrene			40.0	32.40		ug/L		81	47 - 130	7	20
Pyrene			40.0	42.83		ug/L		107	41 - 130	1	40
4-Chloro-3-methylphenol			40.0	33.32		ug/L		83	43 - 130	0	20
2-Chlorophenol			40.0	26.11		ug/L		65	36 - 130	1	20
2-Methylphenol			40.0	29.80		ug/L		74	37 - 130	2	20
3 & 4 Methylphenol			40.0	29.76		ug/L		74	39 - 130	4	20
2,4-Dichlorophenol			40.0	24.38		ug/L		61	41 - 130	2	20
2,4-Dimethylphenol			40.0	24.86		ug/L		62	32 - 130	2	20
4,6-Dinitro-2-methylphenol			80.0	75.49		ug/L		94	49 - 130	2	20
2,4-Dinitrophenol			80.0	41.74	J	ug/L		52	34 - 130	13	20
2-Nitrophenol			40.0	27.28		ug/L		68	43 - 130	1	20
4-Nitrophenol			80.0	60.96		ug/L		76	10 - 133	14	20
Pentachlorophenol			80.0	29.67	J *	ug/L		37	34 - 130	21	20
Phenol			40.0	19.56		ug/L		49	21 - 130	3	20
2,4,5-Trichlorophenol			40.0	26.17		ug/L		65	39 - 130	2	20
2,4,6-Trichlorophenol			40.0	24.35		ug/L		61	36 - 130	5	20
bis (2-Chloroisopropyl) ether			40.0	33.91		ug/L		85	29 - 130	1	20
1,1'-Biphenyl			40.0	26.35		ug/L		66	37 - 130	5	20
Acetophenone			40.0	29.67		ug/L		74	39 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*24 - 150*
2-Fluorophenol	*50*		*10 - 130*
2-Fluorobiphenyl	*59*		*38 - 133*
2,4,6-Tribromophenol	*57*		*19 - 150*
Terphenyl-d14	*99*		*35 - 150*
Phenol-d5 (Surr)	*51*		*10 - 130*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: MB 600-280706/1-A
Matrix: Solid
Analysis Batch: 280732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Acenaphthylene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Anthracene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Benzo[a]anthracene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Benzo[b]fluoranthene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Benzo[k]fluoranthene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Benzo[g,h,i]perylene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Benzo[a]pyrene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Bis(2-chloroethyl)ether	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Bis(2-ethylhexyl) phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Butyl benzyl phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Chloroaniline	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Chloronaphthalene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Carbazole	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Chrysene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Di-n-butyl phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Dibenz(a,h)anthracene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Dibenzofuran	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
3,3'-Dichlorobenzidine	ND		660		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Diethyl phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Dimethyl phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4-Dinitrotoluene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,6-Dinitrotoluene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Di-n-octyl phthalate	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Fluoranthene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Fluorene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Hexachlorobenzene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Hexachloroethane	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Hexachlorobutadiene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Indeno[1,2,3-cd]pyrene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Isophorone	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Methylnaphthalene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Naphthalene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
3-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Nitroaniline	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Nitrobenzene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
N-Nitrosodi-n-propylamine	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Phenanthrene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Pyrene	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Chlorophenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Methylphenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: MB 600-280706/1-A
Matrix: Solid
Analysis Batch: 280732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	ND		660		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4-Dichlorophenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4-Dimethylphenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4,6-Dinitro-2-methylphenol	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4-Dinitrophenol	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2-Nitrophenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
4-Nitrophenol	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Pentachlorophenol	ND		1600		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Phenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
bis (2-Chloroisopropyl) ether	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
1,1'-Biphenyl	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1
Acetophenone	ND		330		ug/Kg		11/19/19 10:25	11/19/19 15:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*53*		*10 - 150*	*11/19/19 10:25*	*11/19/19 15:38*	*1*
2-Fluorophenol	*55*		*25 - 132*	*11/19/19 10:25*	*11/19/19 15:38*	*1*
2-Fluorobiphenyl	*56*		*38 - 130*	*11/19/19 10:25*	*11/19/19 15:38*	*1*
2,4,6-Tribromophenol	*36*		*10 - 148*	*11/19/19 10:25*	*11/19/19 15:38*	*1*
Terphenyl-d14	*58*		*53 - 134*	*11/19/19 10:25*	*11/19/19 15:38*	*1*
Phenol-d5 (Surr)	*56*		*27 - 123*	*11/19/19 10:25*	*11/19/19 15:38*	*1*

Lab Sample ID: LCS 600-280706/2-A
Matrix: Solid
Analysis Batch: 280732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	3330	2985		ug/Kg		90	58 - 130
Acenaphthylene	3330	2704		ug/Kg		81	56 - 130
Anthracene	3330	2585		ug/Kg		78	58 - 130
Benzo[a]anthracene	3330	2657		ug/Kg		80	49 - 130
Benzo[b]fluoranthene	3330	2621		ug/Kg		79	58 - 130
Benzo[k]fluoranthene	3330	3006		ug/Kg		90	56 - 130
Benzo[g,h,i]perylene	3330	2545		ug/Kg		76	49 - 135
Benzo[a]pyrene	3330	2649		ug/Kg		79	58 - 130
Bis(2-chloroethoxy)methane	3330	2683		ug/Kg		80	49 - 130
Bis(2-chloroethyl)ether	3330	2709		ug/Kg		81	44 - 130
Bis(2-ethylhexyl) phthalate	3330	2504		ug/Kg		75	47 - 133
4-Bromophenyl phenyl ether	3330	2964		ug/Kg		89	56 - 130
Butyl benzyl phthalate	3330	2681		ug/Kg		80	43 - 135
4-Chloroaniline	3330	2193		ug/Kg		66	42 - 130
2-Chloronaphthalene	3330	2526		ug/Kg		76	51 - 130
4-Chlorophenyl phenyl ether	3330	2624		ug/Kg		79	57 - 130
Carbazole	3330	2619		ug/Kg		79	47 - 131
Chrysene	3330	2696		ug/Kg		81	50 - 130
Di-n-butyl phthalate	3330	2868		ug/Kg		86	54 - 130

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-280706/2-A
Matrix: Solid
Analysis Batch: 280732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	3330	2584		ug/Kg		78	48 - 130
Dibenzofuran	3330	2857		ug/Kg		86	58 - 130
3,3'-Dichlorobenzidine	3330	3132		ug/Kg		94	41 - 130
Diethyl phthalate	3330	2949		ug/Kg		88	55 - 130
Dimethyl phthalate	3330	2655		ug/Kg		80	58 - 130
2,4-Dinitrotoluene	3330	2568		ug/Kg		77	53 - 130
2,6-Dinitrotoluene	3330	2745		ug/Kg		82	53 - 130
Di-n-octyl phthalate	3330	2608		ug/Kg		78	45 - 135
Fluoranthene	3330	2737		ug/Kg		82	56 - 130
Fluorene	3330	2783		ug/Kg		83	52 - 147
Hexachlorobenzene	3330	3053		ug/Kg		92	59 - 130
Hexachlorocyclopentadiene	3330	1266		ug/Kg		38	33 - 130
Hexachloroethane	3330	2392		ug/Kg		72	36 - 130
Hexachlorobutadiene	3330	2667		ug/Kg		80	49 - 130
Indeno[1,2,3-cd]pyrene	3330	2561		ug/Kg		77	41 - 130
Isophorone	3330	2664		ug/Kg		80	49 - 130
2-Methylnaphthalene	3330	2629		ug/Kg		79	54 - 130
Naphthalene	3330	2526		ug/Kg		76	49 - 130
2-Nitroaniline	3330	2790		ug/Kg		84	49 - 149
3-Nitroaniline	3330	2290		ug/Kg		69	45 - 133
4-Nitroaniline	3330	2665		ug/Kg		80	48 - 139
Nitrobenzene	3330	2538		ug/Kg		76	47 - 130
N-Nitrosodiphenylamine	3330	2559		ug/Kg		77	47 - 130
N-Nitrosodi-n-propylamine	3330	2703		ug/Kg		81	43 - 130
Phenanthrene	3330	2826		ug/Kg		85	58 - 130
Pyrene	3330	2795		ug/Kg		84	48 - 131
4-Chloro-3-methylphenol	3330	2781		ug/Kg		83	54 - 130
2-Chlorophenol	3330	2577		ug/Kg		77	48 - 130
2-Methylphenol	3330	2755		ug/Kg		83	46 - 130
3 & 4 Methylphenol	3330	2901		ug/Kg		87	44 - 130
2,4-Dichlorophenol	3330	2679		ug/Kg		80	56 - 130
2,4-Dimethylphenol	3330	2632		ug/Kg		79	46 - 130
4,6-Dinitro-2-methylphenol	6670	5628		ug/Kg		84	45 - 130
2,4-Dinitrophenol	6670	4664		ug/Kg		70	25 - 130
2-Nitrophenol	3330	2727		ug/Kg		82	50 - 130
4-Nitrophenol	6670	4283		ug/Kg		64	20 - 132
Pentachlorophenol	6670	5222		ug/Kg		78	34 - 130
Phenol	3330	2763		ug/Kg		83	33 - 130
2,4,5-Trichlorophenol	3330	2793		ug/Kg		84	59 - 136
2,4,6-Trichlorophenol	3330	2823		ug/Kg		85	59 - 134
bis (2-Chloroisopropyl) ether	3330	2987		ug/Kg		90	39 - 130
1,1'-Biphenyl	3330	2973		ug/Kg		89	56 - 130
Acetophenone	3330	2596		ug/Kg		78	42 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*76*		*10 - 150*
2-Fluorophenol	*77*		*25 - 132*

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 600-280706/2-A
Matrix: Solid
Analysis Batch: 280732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280706

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*38 - 130*
2,4,6-Tribromophenol	*94*		*10 - 148*
Terphenyl-d14	*79*		*53 - 134*
Phenol-d5 (Surr)	*79*		*27 - 123*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 600-281609/1-A
Matrix: Solid
Analysis Batch: 281762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281609

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1221	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1232	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1242	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1248	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1254	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1
PCB-1260	ND	*	16.7		ug/Kg		11/29/19 05:20	12/02/19 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*38*	*	*10 - 150*	*11/29/19 05:20*	*12/02/19 12:12*	*1*
DCB Decachlorobiphenyl	*80*	*	*10 - 150*	*11/29/19 05:20*	*12/02/19 12:12*	*1*

Lab Sample ID: LCS 600-281609/2-A
Matrix: Solid
Analysis Batch: 281762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281609

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			166	146.1	*	ug/Kg		88	42 - 130		
PCB-1260			166	130.0	*	ug/Kg		78	59 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*55*	*	*10 - 150*
DCB Decachlorobiphenyl	*103*	*	*10 - 150*

Lab Sample ID: 600-195874-1 MS
Matrix: Solid
Analysis Batch: 281762

Client Sample ID: CBPSB11010206
Prep Type: Total/NA
Prep Batch: 281609

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1	166	258.4	F1	ug/Kg		156	42 - 130		
PCB-1260	ND	F1	166	263.5	F1	ug/Kg		159	59 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*128*		*10 - 150*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 600-195874-1 MS
Matrix: Solid
Analysis Batch: 281762

Client Sample ID: CBPSB11010206
Prep Type: Total/NA
Prep Batch: 281609

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*185*	*X*	*10 - 150*

Lab Sample ID: 600-195874-1 MSD
Matrix: Solid
Analysis Batch: 281762

Client Sample ID: CBPSB11010206
Prep Type: Total/NA
Prep Batch: 281609

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1 F2	166	212.8		ug/Kg		128	42 - 130	16	30
PCB-1260	ND	F1 F2	166	202.1		ug/Kg		122	59 - 135	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*10 - 150*
DCB Decachlorobiphenyl	*136*		*10 - 150*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-280878/1-A
Matrix: Water
Analysis Batch: 281288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Aluminum	ND		0.500		mg/L		11/20/19 13:24	11/25/19 13:38	1
Arsenic	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Barium	ND		0.0200		mg/L		11/20/19 13:24	11/25/19 13:38	1
Beryllium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 13:38	1
Calcium	ND		1.00		mg/L		11/20/19 13:24	11/25/19 13:38	1
Cadmium	ND		0.00500		mg/L		11/20/19 13:24	11/25/19 13:38	1
Cobalt	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Chromium	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Copper	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Iron	ND		0.400		mg/L		11/20/19 13:24	11/25/19 13:38	1
Potassium	ND		1.00		mg/L		11/20/19 13:24	11/25/19 13:38	1
Magnesium	ND		1.00		mg/L		11/20/19 13:24	11/25/19 13:38	1
Manganese	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Sodium	ND		1.00		mg/L		11/20/19 13:24	11/25/19 13:38	1
Nickel	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Lead	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Antimony	ND		0.0500		mg/L		11/20/19 13:24	11/25/19 13:38	1
Selenium	ND		0.0400		mg/L		11/20/19 13:24	11/25/19 13:38	1
Thallium	ND		0.0300		mg/L		11/20/19 13:24	11/25/19 13:38	1
Vanadium	ND		0.0100		mg/L		11/20/19 13:24	11/25/19 13:38	1
Zinc	ND		0.0300		mg/L		11/20/19 13:24	11/25/19 13:38	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-280878/2-A
Matrix: Water
Analysis Batch: 281288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2516		mg/L		101	80 - 120
Aluminum	10.0	10.31		mg/L		103	80 - 120
Arsenic	1.00	1.014		mg/L		101	80 - 120
Barium	1.00	1.018		mg/L		102	80 - 120
Beryllium	1.00	1.025		mg/L		103	80 - 120
Calcium	10.0	10.25		mg/L		103	80 - 120
Cadmium	1.00	1.026		mg/L		103	80 - 120
Cobalt	1.00	0.9841		mg/L		98	80 - 120
Chromium	1.00	1.003		mg/L		100	80 - 120
Copper	1.00	1.005		mg/L		101	80 - 120
Iron	10.0	10.32		mg/L		103	80 - 120
Potassium	10.0	10.34		mg/L		103	80 - 120
Magnesium	10.0	10.19		mg/L		102	80 - 120
Manganese	1.00	1.019		mg/L		102	80 - 120
Sodium	10.0	10.32		mg/L		103	80 - 120
Nickel	1.00	0.9992		mg/L		100	80 - 120
Lead	1.00	0.9985		mg/L		100	80 - 120
Antimony	1.50	1.644		mg/L		110	80 - 120
Selenium	1.00	1.011		mg/L		101	80 - 120
Thallium	1.00	0.9847		mg/L		98	80 - 120
Vanadium	1.00	1.017		mg/L		102	80 - 120
Zinc	0.500	0.4938		mg/L		99	80 - 120

Lab Sample ID: MB 600-281302/1-A
Matrix: Solid
Analysis Batch: 281409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.400		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Aluminum	ND		25.0		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Arsenic	ND		1.00		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Barium	ND		1.00		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Beryllium	ND		0.250		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Calcium	ND		100		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Cadmium	ND		0.250		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Cobalt	ND		0.500		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Chromium	ND		0.500		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Copper	ND		0.500		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Iron	ND		20.0		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Potassium	ND		100		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Magnesium	ND		100		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Manganese	ND		1.50		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Sodium	ND		100		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Nickel	ND		1.00		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Lead	ND		0.500		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Antimony	ND		2.50		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Selenium	ND		2.00		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Thallium	ND		1.50		mg/Kg		11/25/19 14:50	11/26/19 12:15	1
Vanadium	ND		0.500		mg/Kg		11/25/19 14:50	11/26/19 12:15	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-281302/1-A
Matrix: Solid
Analysis Batch: 281409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		1.50		mg/Kg		11/25/19 14:50	11/26/19 12:15	1

Lab Sample ID: LCSSRM 600-281302/2-A
Matrix: Solid
Analysis Batch: 281409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281302

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	34.8	30.15		mg/Kg		86.6	58.3 - 112.9
Aluminum	13700	9131		mg/Kg		66.7	35.7 - 110.2
Arsenic	319	284.2		mg/Kg		89.1	60.2 - 111.6
Barium	299	230.4		mg/Kg		77.1	59.2 - 110.0
Beryllium	190	164.1		mg/Kg		86.4	64.2 - 110.0
Calcium	16000	13470		mg/Kg		84.2	61.8 - 110.0
Cadmium	182	157.4		mg/Kg		86.5	65.4 - 109.9
Cobalt	280	258.3		mg/Kg		92.3	63.2 - 110.0
Chromium	189	157.5		mg/Kg		83.4	59.8 - 110.6
Copper	107	90.85		mg/Kg		84.9	61.6 - 110.3
Iron	18600	13230		mg/Kg		71.1	24.7 - 121.5
Potassium	11600	9892		mg/Kg		85.3	59.0 - 110.3
Magnesium	13600	11160		mg/Kg		82.0	62.5 - 110.3
Manganese	1390	1073		mg/Kg		77.2	66.1 - 110.1
Sodium	14200	11890		mg/Kg		83.7	58.7 - 113.4
Nickel	117	108.3		mg/Kg		92.6	59.6 - 110.3
Lead	148	133.7		mg/Kg		90.4	61.0 - 110.1
Antimony	118	29.64		mg/Kg		25.1	10.0 - 110.2
Selenium	322	279.9		mg/Kg		86.9	57.8 - 109.9
Thallium	253	221.2		mg/Kg		87.4	59.7 - 109.9
Vanadium	40.1	23.95		mg/Kg		59.7	20.0 - 115.2
Zinc	498	452.3		mg/Kg		90.8	58.8 - 110.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-282256/1-A
Matrix: Water
Analysis Batch: 282333

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 282256

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Aluminum	ND		0.500		mg/L		12/05/19 17:01	12/06/19 14:12	1
Arsenic	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Barium	ND		0.0200		mg/L		12/05/19 17:01	12/06/19 14:12	1
Beryllium	ND		0.00500		mg/L		12/05/19 17:01	12/06/19 14:12	1
Calcium	ND		1.00		mg/L		12/05/19 17:01	12/06/19 14:12	1
Cadmium	ND		0.00500		mg/L		12/05/19 17:01	12/06/19 14:12	1
Cobalt	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Chromium	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Copper	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Iron	ND		0.400		mg/L		12/05/19 17:01	12/06/19 14:12	1
Potassium	ND		1.00		mg/L		12/05/19 17:01	12/06/19 14:12	1
Magnesium	ND		1.00		mg/L		12/05/19 17:01	12/06/19 14:12	1
Manganese	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Sodium	ND		1.00		mg/L		12/05/19 17:01	12/06/19 14:12	1
Nickel	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Lead	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Antimony	ND		0.0500		mg/L		12/05/19 17:01	12/06/19 14:12	1
Selenium	ND		0.0400		mg/L		12/05/19 17:01	12/06/19 14:12	1
Thallium	ND		0.0300		mg/L		12/05/19 17:01	12/06/19 14:12	1
Vanadium	ND		0.0100		mg/L		12/05/19 17:01	12/06/19 14:12	1
Zinc	ND		0.0300		mg/L		12/05/19 17:01	12/06/19 14:12	1

Lab Sample ID: LCS 600-282256/2-A
Matrix: Water
Analysis Batch: 282333

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 282256

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2483		mg/L		99	80 - 120
Aluminum	10.0	10.47		mg/L		105	80 - 120
Arsenic	1.00	0.8319		mg/L		83	80 - 120
Barium	1.00	1.012		mg/L		101	80 - 120
Beryllium	1.00	1.048		mg/L		105	80 - 120
Calcium	10.0	10.10		mg/L		101	80 - 120
Cadmium	1.00	0.8415		mg/L		84	80 - 120
Cobalt	1.00	1.000		mg/L		100	80 - 120
Chromium	1.00	1.110		mg/L		111	80 - 120
Copper	1.00	1.121		mg/L		112	80 - 120
Iron	10.0	10.17		mg/L		102	80 - 120
Potassium	10.0	10.30		mg/L		103	80 - 120
Magnesium	10.0	9.647		mg/L		96	80 - 120
Manganese	1.00	1.134		mg/L		113	80 - 120
Sodium	10.0	10.47		mg/L		105	80 - 120
Nickel	1.00	0.9851		mg/L		99	80 - 120
Lead	1.00	0.9774		mg/L		98	80 - 120
Antimony	1.50	1.388		mg/L		93	80 - 120
Selenium	1.00	0.8477		mg/L		85	80 - 120
Thallium	1.00	1.125		mg/L		113	80 - 120
Vanadium	1.00	1.091		mg/L		109	80 - 120

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-282256/2-A
Matrix: Water
Analysis Batch: 282333

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 282256

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Zinc			0.500	0.5073		mg/L		101	80 - 120		

Lab Sample ID: 600-195874-8 MS
Matrix: Water
Analysis Batch: 282333

Client Sample ID: CBPSB1401GW
Prep Type: Dissolved
Prep Batch: 282256

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	ND		0.250	0.2479		mg/L		99	75 - 125		
Aluminum	ND		10.0	10.66		mg/L		107	75 - 125		
Arsenic	ND	F2	1.50	1.252		mg/L		83	75 - 125		
Barium	0.0951	F2	1.50	1.578		mg/L		99	75 - 125		
Beryllium	ND	F2	1.50	1.549		mg/L		103	75 - 125		
Calcium	52.8		10.0	63.39	4	mg/L		106	75 - 125		
Cadmium	ND	F2	1.50	1.258		mg/L		84	75 - 125		
Cobalt	ND	F2	1.50	1.510		mg/L		101	75 - 125		
Chromium	ND	F2	1.50	1.626		mg/L		108	75 - 125		
Copper	ND	F2	1.50	1.667		mg/L		111	75 - 125		
Iron	ND		10.0	10.15		mg/L		102	75 - 125		
Potassium	1.96		10.0	12.30		mg/L		103	75 - 125		
Magnesium	70.8		10.0	79.35	4	mg/L		86	75 - 125		
Manganese	0.216	F2	1.50	1.851		mg/L		109	75 - 125		
Sodium	57.4		10.0	67.09	4	mg/L		97	75 - 125		
Nickel	ND	F2	1.50	1.482		mg/L		99	75 - 125		
Lead	ND	F2	1.50	1.463		mg/L		98	75 - 125		
Antimony	ND	F2	2.00	1.840		mg/L		92	75 - 125		
Selenium	ND	F2	1.50	1.277		mg/L		85	75 - 125		
Thallium	ND	F2	1.50	1.656		mg/L		110	75 - 125		
Vanadium	ND	F2	1.50	1.612		mg/L		107	75 - 125		
Zinc	0.0589		0.500	0.5514		mg/L		99	75 - 125		

Lab Sample ID: 600-195874-8 MSD
Matrix: Water
Analysis Batch: 282333

Client Sample ID: CBPSB1401GW
Prep Type: Dissolved
Prep Batch: 282256

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.250	0.2460		mg/L		98	75 - 125	1	20
Aluminum	ND		10.0	10.77		mg/L		108	75 - 125	1	20
Arsenic	ND	F2	1.00	0.8389	F4	mg/L		84	75 - 125	40	20
Barium	0.0951	F2	1.00	1.086	F4	mg/L		99	75 - 125	37	20
Beryllium	ND	F2	1.00	1.039	F4	mg/L		104	75 - 125	39	20
Calcium	52.8		10.0	63.27	4	mg/L		105	75 - 125	0	20
Cadmium	ND	F2	1.00	0.8430	F4	mg/L		84	75 - 125	40	20
Cobalt	ND	F2	1.00	1.011	F4	mg/L		101	75 - 125	40	20
Chromium	ND	F2	1.00	1.077	F4	mg/L		108	75 - 125	41	20
Copper	ND	F2	1.00	1.107	F4	mg/L		111	75 - 125	40	20
Iron	ND		10.0	10.20		mg/L		102	75 - 125	0	20
Potassium	1.96		10.0	12.34		mg/L		104	75 - 125	0	20
Magnesium	70.8		10.0	79.97	4	mg/L		92	75 - 125	1	20
Manganese	0.216	F2	1.00	1.296	F4	mg/L		108	75 - 125	35	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-195874-8 MSD
Matrix: Water
Analysis Batch: 282333

Client Sample ID: CBPSB1401GW
Prep Type: Dissolved
Prep Batch: 282256

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	57.4		10.0	67.27	4	mg/L		98	75 - 125	0	20
Nickel	ND	F2	1.00	0.9922	F4	mg/L		99	75 - 125	40	20
Lead	ND	F2	1.00	0.9764	F4	mg/L		98	75 - 125	40	20
Antimony	ND	F2	1.50	1.383	F4	mg/L		92	75 - 125	28	20
Selenium	ND	F2	1.00	0.8554	F4	mg/L		86	75 - 125	40	20
Thallium	ND	F2	1.00	1.142	F4	mg/L		113	75 - 125	37	20
Vanadium	ND	F2	1.00	1.069	F4	mg/L		107	75 - 125	41	20
Zinc	0.0589		0.500	0.5401		mg/L		96	75 - 125	2	20

Lab Sample ID: 600-195874-8 DU
Matrix: Water
Analysis Batch: 282333

Client Sample ID: CBPSB1401GW
Prep Type: Dissolved
Prep Batch: 282256

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	ND		ND		mg/L		NC	20
Aluminum	ND		ND		mg/L		NC	20
Arsenic	ND	F2	ND		mg/L		NC	20
Barium	0.0951	F2	0.09040		mg/L		5	20
Beryllium	ND	F2	ND		mg/L		NC	20
Calcium	52.8		53.45		mg/L		1	20
Cadmium	ND	F2	ND		mg/L		NC	20
Cobalt	ND	F2	ND		mg/L		NC	20
Chromium	ND	F2	ND		mg/L		NC	20
Copper	ND	F2	ND		mg/L		NC	20
Iron	ND		ND		mg/L		NC	20
Potassium	1.96		2.000		mg/L		2	20
Magnesium	70.8		71.10		mg/L		0.5	20
Manganese	0.216	F2	0.2152		mg/L		0.3	20
Sodium	57.4		57.96		mg/L		0.9	20
Nickel	ND	F2	ND		mg/L		NC	20
Lead	ND	F2	ND		mg/L		NC	20
Antimony	ND	F2	ND		mg/L		NC	20
Selenium	ND	F2	ND		mg/L		NC	20
Thallium	ND	F2	ND		mg/L		NC	20
Vanadium	ND	F2	ND		mg/L		NC	20
Zinc	0.0589		0.04890		mg/L		19	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-281890/7-B
Matrix: Water
Analysis Batch: 281978

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281890

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/03/19 08:51	12/03/19 14:18	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-281890/8-B
Matrix: Water
Analysis Batch: 281978

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281890

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.75	3.805		ug/L		101	70 - 130

Lab Sample ID: MB 600-282451/7-A
Matrix: Water
Analysis Batch: 282523

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/09/19 09:33	12/09/19 13:05	1

Lab Sample ID: LCS 600-282451/8-A
Matrix: Water
Analysis Batch: 282523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.75	3.844		ug/L		103	70 - 130

Lab Sample ID: MB 600-282720/1-A
Matrix: Water
Analysis Batch: 282773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/11/19 10:06	12/11/19 14:04	1

Lab Sample ID: LCS 600-282720/2-A
Matrix: Water
Analysis Batch: 282773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.75	3.749		ug/L		100	70 - 130

Lab Sample ID: LB 600-282025/1-H
Matrix: Water
Analysis Batch: 282523

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 282451

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/09/19 09:33	12/09/19 13:43	1

Lab Sample ID: LB 600-282152/1-E
Matrix: Water
Analysis Batch: 282523

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 282451

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.250		ug/L		12/09/19 09:33	12/09/19 14:05	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-281786/7-B
Matrix: Solid
Analysis Batch: 281948

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		15.5		ug/Kg		12/02/19 11:38	12/03/19 11:59	1

Lab Sample ID: LCS 600-281786/8-B
Matrix: Solid
Analysis Batch: 281948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281786

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			234	241.1		ug/Kg		103	70 - 130		

Lab Sample ID: 600-195874-1 MS
Matrix: Solid
Analysis Batch: 281948

Client Sample ID: CBPSB11010206
Prep Type: Total/NA
Prep Batch: 281786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		238	281.9		ug/Kg		117	75 - 125		

Lab Sample ID: 600-195874-1 DU
Matrix: Solid
Analysis Batch: 281948

Client Sample ID: CBPSB11010206
Prep Type: Total/NA
Prep Batch: 281786

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	ND			ND		ug/Kg				NC	20

GC/MS VOA

Analysis Batch: 280650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	8260B	
600-195874-5	CBPSB1102GW	Total/NA	Water	8260B	
600-195874-8	CBPSB1401GW	Total/NA	Water	8260B	
MB 600-280650/6	Method Blank	Total/NA	Water	8260B	
LCS 600-280650/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-280650/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 280696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-8 - DL	CBPSB1401GW	Total/NA	Water	8260B	
MB 600-280696/7	Method Blank	Total/NA	Water	8260B	
LCS 600-280696/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-280696/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 281190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	8260B	281198
600-195874-2	CBPSB11020206	Total/NA	Solid	8260B	281198
600-195874-3	CBPSB11012416	Total/NA	Solid	8260B	281198
600-195874-6	CBPSB14010206	Total/NA	Solid	8260B	281198
600-195874-7	CBPSB14012830	Total/NA	Solid	8260B	281198
MB 600-281190/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-281190/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-281190/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 281198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	5030B	
600-195874-2	CBPSB11020206	Total/NA	Solid	5030B	
600-195874-3	CBPSB11012416	Total/NA	Solid	5030B	
600-195874-6	CBPSB14010206	Total/NA	Solid	5030B	
600-195874-7	CBPSB14012830	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 280581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	3510C LVI	
600-195874-5	CBPSB1102GW	Total/NA	Water	3510C LVI	
600-195874-8	CBPSB1401GW	Total/NA	Water	3510C LVI	
MB 600-280581/1-A	Method Blank	Total/NA	Water	3510C LVI	
LCS 600-280581/2-A	Lab Control Sample	Total/NA	Water	3510C LVI	
LCSD 600-280581/3-A	Lab Control Sample Dup	Total/NA	Water	3510C LVI	

Prep Batch: 280706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	3546	
600-195874-2	CBPSB11020206	Total/NA	Solid	3546	
600-195874-3	CBPSB11012416	Total/NA	Solid	3546	
600-195874-6	CBPSB14010206	Total/NA	Solid	3546	
600-195874-7	CBPSB14012830	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 280706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-280706/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-280706/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 280712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	8270C	280581
600-195874-5	CBPSB1102GW	Total/NA	Water	8270C	280581
600-195874-8	CBPSB1401GW	Total/NA	Water	8270C	280581
MB 600-280581/1-A	Method Blank	Total/NA	Water	8270C	280581
LCS 600-280581/2-A	Lab Control Sample	Total/NA	Water	8270C	280581
LCSD 600-280581/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	280581

Analysis Batch: 280732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-280706/1-A	Method Blank	Total/NA	Solid	8270C	280706
LCS 600-280706/2-A	Lab Control Sample	Total/NA	Solid	8270C	280706

Analysis Batch: 280801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	8270C	280706
600-195874-2	CBPSB11020206	Total/NA	Solid	8270C	280706
600-195874-3	CBPSB11012416	Total/NA	Solid	8270C	280706
600-195874-6	CBPSB14010206	Total/NA	Solid	8270C	280706
600-195874-7	CBPSB14012830	Total/NA	Solid	8270C	280706

GC Semi VOA

Prep Batch: 281609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	3546	
600-195874-2	CBPSB11020206	Total/NA	Solid	3546	
MB 600-281609/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-281609/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-195874-1 MS	CBPSB11010206	Total/NA	Solid	3546	
600-195874-1 MSD	CBPSB11010206	Total/NA	Solid	3546	

Analysis Batch: 281762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	8082	281609
600-195874-2	CBPSB11020206	Total/NA	Solid	8082	281609
MB 600-281609/1-A	Method Blank	Total/NA	Solid	8082	281609
LCS 600-281609/2-A	Lab Control Sample	Total/NA	Solid	8082	281609
600-195874-1 MS	CBPSB11010206	Total/NA	Solid	8082	281609
600-195874-1 MSD	CBPSB11010206	Total/NA	Solid	8082	281609

Metals

Prep Batch: 280878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	3010A	
600-195874-8	CBPSB1401GW	Total/NA	Water	3010A	
MB 600-280878/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 280878 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-280878/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 281288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	6010B	280878
600-195874-8	CBPSB1401GW	Total/NA	Water	6010B	280878
MB 600-280878/1-A	Method Blank	Total/NA	Water	6010B	280878
LCS 600-280878/2-A	Lab Control Sample	Total/NA	Water	6010B	280878

Prep Batch: 281302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	3050B	
600-195874-2	CBPSB11020206	Total/NA	Solid	3050B	
600-195874-6	CBPSB14010206	Total/NA	Solid	3050B	
MB 600-281302/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-281302/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 281409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	6010B	281302
600-195874-2	CBPSB11020206	Total/NA	Solid	6010B	281302
600-195874-6	CBPSB14010206	Total/NA	Solid	6010B	281302
MB 600-281302/1-A	Method Blank	Total/NA	Solid	6010B	281302
LCSSRM 600-281302/2-A	Lab Control Sample	Total/NA	Solid	6010B	281302

Prep Batch: 281786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	7471A	
600-195874-2	CBPSB11020206	Total/NA	Solid	7471A	
600-195874-6	CBPSB14010206	Total/NA	Solid	7471A	
MB 600-281786/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-281786/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-195874-1 MS	CBPSB11010206	Total/NA	Solid	7471A	
600-195874-1 DU	CBPSB11010206	Total/NA	Solid	7471A	

Prep Batch: 281890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	7470A	
600-195874-8	CBPSB1401GW	Total/NA	Water	7470A	
MB 600-281890/7-B	Method Blank	Total/NA	Water	7470A	
LCS 600-281890/8-B	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 281948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-1	CBPSB11010206	Total/NA	Solid	7471A	281786
600-195874-2	CBPSB11020206	Total/NA	Solid	7471A	281786
600-195874-6	CBPSB14010206	Total/NA	Solid	7471A	281786
MB 600-281786/7-B	Method Blank	Total/NA	Solid	7471A	281786
LCS 600-281786/8-B	Lab Control Sample	Total/NA	Solid	7471A	281786
600-195874-1 MS	CBPSB11010206	Total/NA	Solid	7471A	281786
600-195874-1 DU	CBPSB11010206	Total/NA	Solid	7471A	281786

Metals

Analysis Batch: 281978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Total/NA	Water	7470A	281890
600-195874-8	CBPSB1401GW	Total/NA	Water	7470A	281890
MB 600-281890/7-B	Method Blank	Total/NA	Water	7470A	281890
LCS 600-281890/8-B	Lab Control Sample	Total/NA	Water	7470A	281890

Leach Batch: 282025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-282025/1-H	Method Blank	Dissolved	Water	1311	

Leach Batch: 282152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-282152/1-E	Method Blank	Dissolved	Water	1311	

Prep Batch: 282256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Dissolved	Water	3005A	
600-195874-8	CBPSB1401GW	Dissolved	Water	3005A	
MB 600-282256/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 600-282256/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
600-195874-8 MS	CBPSB1401GW	Dissolved	Water	3005A	
600-195874-8 MSD	CBPSB1401GW	Dissolved	Water	3005A	
600-195874-8 DU	CBPSB1401GW	Dissolved	Water	3005A	

Analysis Batch: 282333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Dissolved	Water	6010B	282256
600-195874-8	CBPSB1401GW	Dissolved	Water	6010B	282256
MB 600-282256/1-A	Method Blank	Total Recoverable	Water	6010B	282256
LCS 600-282256/2-A	Lab Control Sample	Total Recoverable	Water	6010B	282256
600-195874-8 MS	CBPSB1401GW	Dissolved	Water	6010B	282256
600-195874-8 MSD	CBPSB1401GW	Dissolved	Water	6010B	282256
600-195874-8 DU	CBPSB1401GW	Dissolved	Water	6010B	282256

Prep Batch: 282451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-8	CBPSB1401GW	Dissolved	Water	7470A	
LB 600-282025/1-H	Method Blank	Dissolved	Water	7470A	282025
LB 600-282152/1-E	Method Blank	Dissolved	Water	7470A	282152
MB 600-282451/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-282451/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 282523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-8	CBPSB1401GW	Dissolved	Water	7470A	282451
LB 600-282025/1-H	Method Blank	Dissolved	Water	7470A	282451
LB 600-282152/1-E	Method Blank	Dissolved	Water	7470A	282451
MB 600-282451/7-A	Method Blank	Total/NA	Water	7470A	282451
LCS 600-282451/8-A	Lab Control Sample	Total/NA	Water	7470A	282451

QC Association Summary

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Metals

Prep Batch: 282720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Dissolved	Water	7470A	
MB 600-282720/1-A	Method Blank	Total/NA	Water	7470A	
LCS 600-282720/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 282773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-195874-4	CBPSB1101GW	Dissolved	Water	7470A	282720
MB 600-282720/1-A	Method Blank	Total/NA	Water	7470A	282720
LCS 600-282720/2-A	Lab Control Sample	Total/NA	Water	7470A	282720

Lab Chronicle

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB11010206
Lab Sample ID: 600-195874-1
Date Collected: 11/13/19 08:30
Matrix: Solid
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.70 g	5 mL	281198	11/24/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	281190	11/24/19 20:39	WS1	TAL HOU
Total/NA	Prep	3546			15.13 g	1.0 mL	280706	11/19/19 10:25	EAT	TAL HOU
Total/NA	Analysis	8270C		1			280801	11/20/19 14:08	LPL	TAL HOU
Total/NA	Prep	3546			15.03 g	5.0 mL	281609	11/29/19 07:31	SMB	TAL HOU
Total/NA	Analysis	8082		1			281762	12/02/19 13:53	JAL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	281302	11/25/19 14:50	CLD	TAL HOU
Total/NA	Analysis	6010B		1			281409	11/26/19 13:33	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	281786	12/02/19 11:38	SOT	TAL HOU
Total/NA	Analysis	7471A		1			281948	12/03/19 12:03	TWR	TAL HOU

Client Sample ID: CBPSB11020206
Lab Sample ID: 600-195874-2
Date Collected: 11/13/19 08:30
Matrix: Solid
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.87 g	5 mL	281198	11/24/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	281190	11/24/19 21:02	WS1	TAL HOU
Total/NA	Prep	3546			15.12 g	1.0 mL	280706	11/19/19 10:25	EAT	TAL HOU
Total/NA	Analysis	8270C		1			280801	11/20/19 14:43	LPL	TAL HOU
Total/NA	Prep	3546			15.03 g	5.0 mL	281609	11/29/19 07:31	SMB	TAL HOU
Total/NA	Analysis	8082		1			281762	12/02/19 15:09	JAL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	281302	11/25/19 14:50	CLD	TAL HOU
Total/NA	Analysis	6010B		1			281409	11/26/19 13:35	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	281786	12/02/19 11:38	SOT	TAL HOU
Total/NA	Analysis	7471A		1			281948	12/03/19 12:09	TWR	TAL HOU

Client Sample ID: CBPSB11012416
Lab Sample ID: 600-195874-3
Date Collected: 11/13/19 09:20
Matrix: Solid
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.50 g	5 mL	281198	11/24/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	281190	11/24/19 21:24	WS1	TAL HOU
Total/NA	Prep	3546			15.14 g	1.0 mL	280706	11/19/19 10:25	EAT	TAL HOU
Total/NA	Analysis	8270C		1			280801	11/20/19 15:19	LPL	TAL HOU

Client Sample ID: CBPSB1101GW
Lab Sample ID: 600-195874-4
Date Collected: 11/13/19 11:30
Matrix: Water
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	280650	11/19/19 08:41	DT1	TAL HOU
Total/NA	Prep	3510C LVI			250 mL	1.0 mL	280581	11/18/19 10:40	LER	TAL HOU
Total/NA	Analysis	8270C		1			280712	11/19/19 20:40	RP	TAL HOU

Lab Chronicle

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB1101GW
Lab Sample ID: 600-195874-4
Date Collected: 11/13/19 11:30
Matrix: Water
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			45 mL	50 mL	282256	12/05/19 17:01	CLD	TAL HOU
Dissolved	Analysis	6010B		1			282333	12/06/19 14:16	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	280878	11/20/19 13:24	P1D	TAL HOU
Total/NA	Analysis	6010B		1			281288	11/25/19 15:29	KP1	TAL HOU
Dissolved	Prep	7470A			40 mL	50 mL	282720	12/11/19 10:06	SOT	TAL HOU
Dissolved	Analysis	7470A		1			282773	12/11/19 15:11	TWR	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	281890	12/03/19 08:51	SOT	TAL HOU
Total/NA	Analysis	7470A		1			281978	12/03/19 14:30	TWR	TAL HOU

Client Sample ID: CBPSB1102GW
Lab Sample ID: 600-195874-5
Date Collected: 11/13/19 11:30
Matrix: Water
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	280650	11/19/19 09:07	DT1	TAL HOU
Total/NA	Prep	3510C LVI			230 mL	1.0 mL	280581	11/18/19 10:40	LER	TAL HOU
Total/NA	Analysis	8270C		1			280712	11/19/19 21:06	RP	TAL HOU

Client Sample ID: CBPSB14010206
Lab Sample ID: 600-195874-6
Date Collected: 11/13/19 12:30
Matrix: Solid
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.27 g	5 mL	281198	11/24/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	281190	11/24/19 21:47	WS1	TAL HOU
Total/NA	Prep	3546			15.15 g	1.0 mL	280706	11/19/19 10:25	EAT	TAL HOU
Total/NA	Analysis	8270C		10			280801	11/20/19 15:54	LPL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50 mL	281302	11/25/19 14:50	CLD	TAL HOU
Total/NA	Analysis	6010B		1			281409	11/26/19 13:37	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	281786	12/02/19 11:38	SOT	TAL HOU
Total/NA	Analysis	7471A		1			281948	12/03/19 12:15	TWR	TAL HOU

Client Sample ID: CBPSB14012830
Lab Sample ID: 600-195874-7
Date Collected: 11/13/19 13:45
Matrix: Solid
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.04 g	5 mL	281198	11/24/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	281190	11/24/19 22:09	WS1	TAL HOU
Total/NA	Prep	3546			15.04 g	1.0 mL	280706	11/19/19 10:25	EAT	TAL HOU
Total/NA	Analysis	8270C		1			280801	11/20/19 16:30	LPL	TAL HOU

Lab Chronicle

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Client Sample ID: CBPSB1401GW
Lab Sample ID: 600-195874-8

Date Collected: 11/14/19 07:30
Matrix: Water
Date Received: 11/15/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	280650	11/19/19 09:33	DT1	TAL HOU
Total/NA	Analysis	8260B	DL	5	5 mL	5 mL	280696	11/19/19 16:22	PXS	TAL HOU
Total/NA	Prep	3510C LVI			240 mL	1.0 mL	280581	11/18/19 10:40	LER	TAL HOU
Total/NA	Analysis	8270C		1			280712	11/19/19 21:31	RP	TAL HOU
Dissolved	Prep	3005A			50 mL	50 mL	282256	12/05/19 17:01	CLD	TAL HOU
Dissolved	Analysis	6010B		1			282333	12/06/19 14:18	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	280878	11/20/19 13:24	P1D	TAL HOU
Total/NA	Analysis	6010B		1			281288	11/25/19 15:31	KP1	TAL HOU
Dissolved	Prep	7470A			40 mL	50 mL	282451	12/09/19 09:33	SOT	TAL HOU
Dissolved	Analysis	7470A		1			282523	12/09/19 14:21	SOT	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	281890	12/03/19 08:51	SOT	TAL HOU
Total/NA	Analysis	7470A		1			281978	12/03/19 14:28	TWR	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 600-195874-1
Project/Site: Paducah Downtown Development Project
SDG: City Block Parcel - Paduckah KY

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-20
Oklahoma	State	2019-073	08-31-20
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

rofins Environment Testing TestAmerica

Client Information	Sampler: Bret Watkins	Lab PM: Hayes, Ken	: 1940-19734.1
Client Contact: Bret Watkins	Phone: 270-538-1530	E-Mail: ken.hayes@testamericain...	1 of 3

Company: HDR Engineering, Inc.

Address: 4645 Village Square Dr Suite F
City: Paducah
State, Zip: KY, 42001
Phone: 270-538-1530
Email: bret.watkins@hdrinc.com
Project Name: Paducah Downtown Development Project
Site: City Block Parcel - Paducah KY

Due Date Requested:
TAT Requested (days): NORMAL
PO #: Not required
WO #:
Project #: 60011607
SSOW#:

Job #:

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270C - TCL 4.2 Default List	8260B - TCL Volatiles TX - default	6010B, 7471A	8082 - standard list	8260B - TCL Volatiles TX - default	6010B, 7470A	6010B, 7470A							Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	A	N	D								
CBPSB11010206	11-13-19	0830	G	Solid			1	1	1	1										4	
CBPSB11020206	11-13-19	0830	G	Solid			1	1	1	1										4	
CBPSB11012426	11-13-19	0920	G	Solid			1	1												2	
CBPSB1101GW	11-13-19	1130	G	W ~~Solid~~	Y		2				3		2							7	
CBPSB1102GW	11-13-19	1130	G	W ~~Solid~~			2				3									5	
CBPSB14010206	11-13-19	1230	G	Solid			1	1	1											3	
CBPSB14012830	11-13-19	1345	G	Solid			1	1												2	
CBPSB1401GW	11-14-19	0730	G	W ~~Solid~~	Y		2				3		2							7	
				Solid																	
				Solid																	
				Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-14-19 / 1230	HDR		11/15/19 1012	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Loc: 600
195874

Eurofins TestAmerica Houston

eurofins | Environment Testing TestAmerica

Sample Receipt Checklist

Date/Time Received: 11/15/19 10:12

JOB NUMBER: _____ CLIENT: HDR

UNPACKED BY: _____ CARRIER/DRIVER: FedEX

Custody Seal Present: ☑YES ☐NO Number of Coolers Received:

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7109	Y / N	Y / N	1.7	676	+0.1	1.8
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☐YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☐YES	☐NO

COMMENTS:

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 600-195874-1
SDG Number: City Block Parcel - Paducka KY

Login Number: 195874
List Number: 1
Creator: Huggins, Relda

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 600-195078-1
SDG Number: Paduckah Downtown Development Project

Login Number: 195078
List Number: 1
Creator: Taylor, Jacquelyn R

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
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	Check done at department level as required.