Mountain View Baptist Church Neighborhood Soil Sampling Report

Former Bramlett Road Site

January 31, 2022

Overview

The CSXT Bramlett Road Site consists of roughly 11 acres and includes the site of a former Duke Power Manufactured Gas Plant (MGP) at 400 East Bramlett Road and what is referred to as the Vaughn Landfill, an unpermitted construction & demolition debris landfill that was located below the former MGP largely in a wetland area. Duke has worked to determine the type and extent of environmental contamination at the site from the MGP and began the cleanup process in 2002 by removing and replacing 61,000 tons of contaminated soil. In July 2016, Duke entered into a Voluntary Cleanup Contract with DHEC to further investigate the site and evaluate options for addressing the remaining contamination.

Remedial Investigation

Duke began a remedial investigation (RI) in 2017 and submitted its findings in a report to DHEC in summer 2020. In the course of the RI it has been determined that the contamination extends into the wetland area to the west of Mountain View Baptist Church (MVBC). Additional investigation work will be completed as cleanup options are considered.

Soil Sampling Results

In updates and ongoing discussions with Mountain View Baptist Church leaders and local residents, concerns have been voiced about possible contamination in the community from the former manufactured gas plant. In response, DHEC worked closely with Mountain View Baptist Church to identify locations where soil samples can be collected and tested. Twelve soil sampling locations of church-owned properties along Cagle Street, Elmore Street, Temple Street, Walnut Street, Willard Street, and West Washington Street (Figure 2) were chosen as well as two background locations (Figure 1) in the area where manufactured gas plant impacts would not be expected.

The sampling was conducted by DHEC staff on March 23, 2021. Soil samples were collected from both the surface and deeper ground levels (1-2 feet). Results of this sampling event indicated that all but one sample was within what could be background levels for the area and within urban environment data for polyaromatic hydrocarbons. One sample, BRS-010-MVBS, was slightly elevated compared to background. This sample was located directly behind Mountain View Baptist Church. Field notes indicated that this sample had a lot of debris and trash within the auger volumes collected. Even so, the deeper sample at this location was within background levels. These results can be seen in Tables 1 and 2.

After reviewing the data, it was determined that conducting a second sampling event with additional sampling locations behind Mountain View Baptist Church would be beneficial to assessing any impacts to the area. A second round of sampling was conducted on June 9, 2021, and samples were collected from 7 additional locations (Figure 3) behind Mountain View Baptist

Church. Results from the second sampling event indicated all samples were below background levels for the area and within expected urban environment data for polyaromatic hydrocarbons. These results can be seen in Tables 3 and 4.

Laboratory data for both sampling events can be found in Appendix 1.

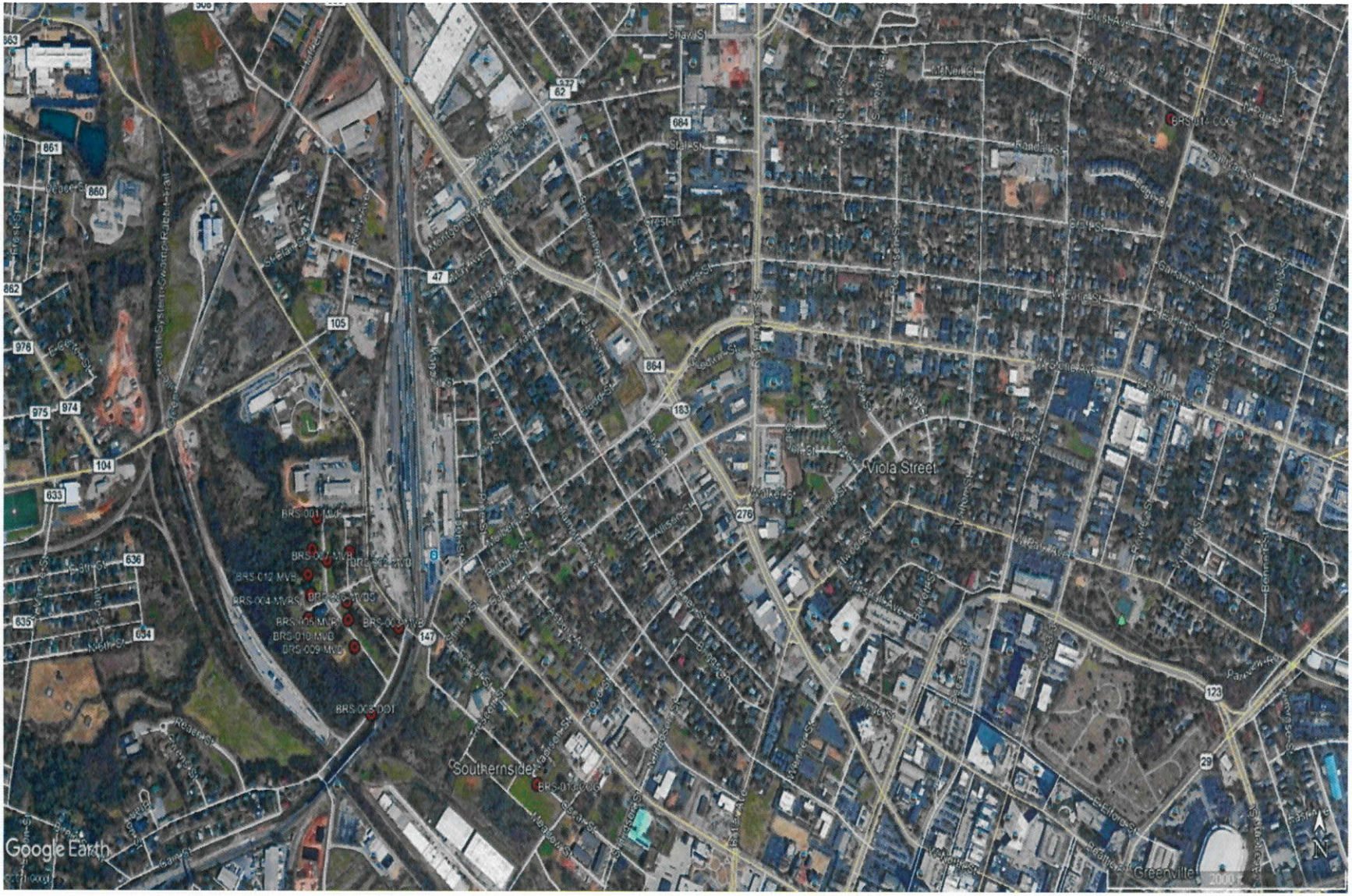
Conclusion Summary

DHEC collected soil samples from the neighborhood around Mountain View Baptist Church on March 23, 2021, and June 9, 2021. The results have been compared to background samples from the area as well as data collected in urban environments as background levels for polyaromatic hydrocarbons. The results do not indicate that there has been an impact from the manufacturing gas plant on surface soils in the neighborhood around Mountain View Baptist Church.

Figures

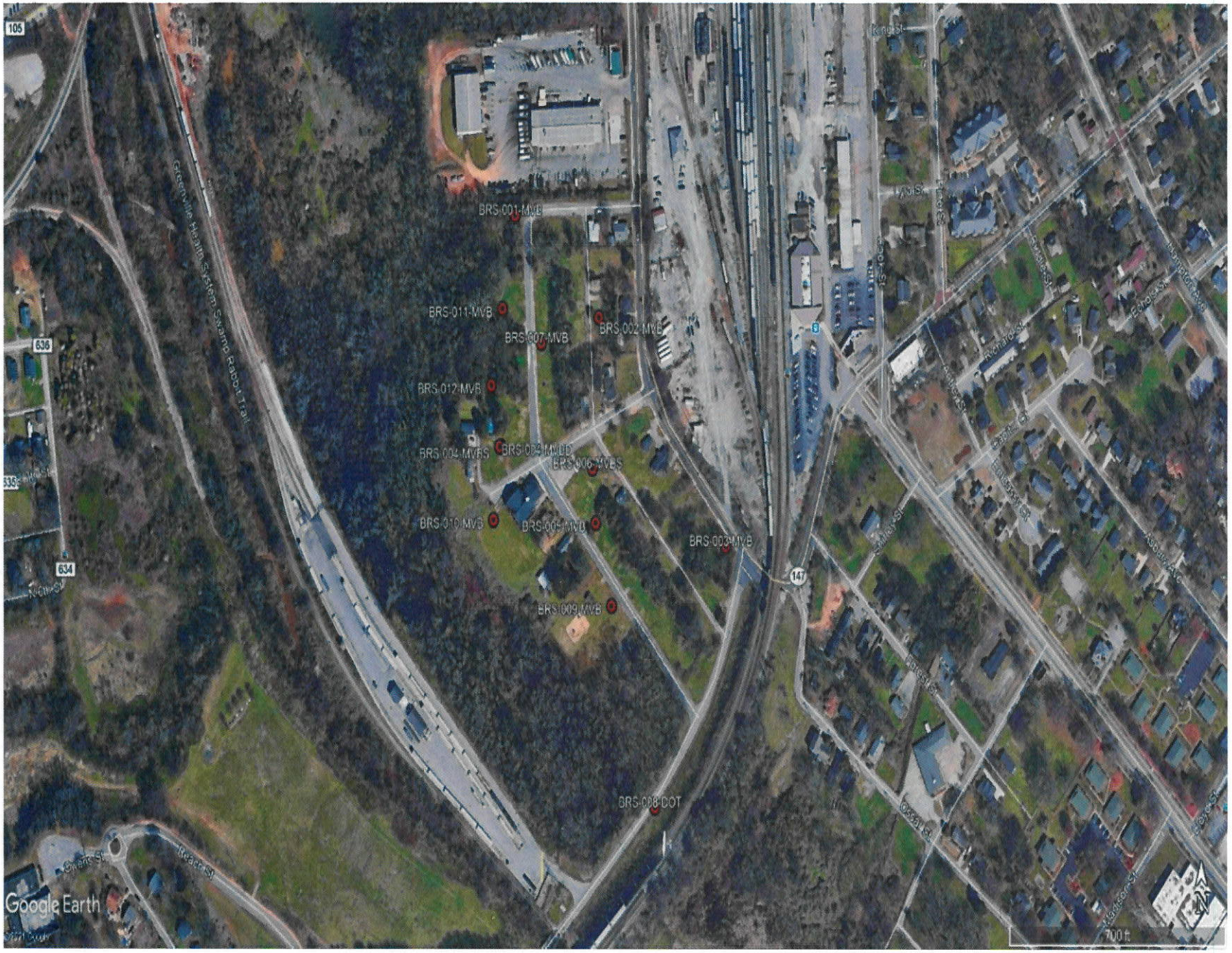
Mountain View Baptist Neighborhood Sampling – Round 1

Figure 1



Mountain View Baptist Neighborhood Sampling – Round 1

Figure 2



Mountain View Baptist Neighborhood Sampling – Round 2

Figure 3

Tables

Table 1

Mountain View Baptist Neighborhood Sampling Round 1 Shallow Soil

		Background	Background								DOT Near Rail		Behind Church		
Parameters	**EPA RSLs**	**BRS 013-COGS**	**BRS 014-COGS**	**BRS-001-MVBS**	**BRS-002-MVBS**	**BRS 003-MVBS**	**BRS 004-MVBS**	**BRS 005-MVBS**	**BRS 006-MVBS**	**BRS-007-MVBS**	**BRS 008-DOTS**	**BRS 009-MVBS**	**BRS 010-MVBS**	**BRS-011-MVBS**	**BRS 012-MVBS**
2-Methylnaphthalene	240000	430	ND	94	670	ND	520	390	280	180	5400	110	1000	1100	420
Acenaphthene	3600000	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NA	340	ND	ND	ND	ND	ND	ND	ND	ND	200	ND	1100	220	ND
Acetophenone	7800000	ND	ND	ND	ND	ND	ND	ND	ND	ND	830	ND	ND	ND	ND
Anthracene	18000000	510	ND	ND	ND	ND	150	ND	ND	ND	220	ND	840	360	95
Benzo(a)anthracene	1100	1400	100	120	180	170	520	680	280	ND	610	170	***3900***	1000	590
Benzo(a)pyrene	110	1900	85	120	250	200	620	830	280	ND	670	210	***5300***	1400	800
Benzo(b)fluoranthene	1100	2300	160	130	430	280	900	1000	460	79	1200	230	***7800***	2100	910
Benzo(g,h,i)perylene	NA	620	ND	ND	190	ND	400	520	150	ND	310	100	***1900***	530	530
Benzo(k)fluoranthene	11000	900	ND	ND	ND	ND	230	400	ND	ND	280	110	***3000***	820	430
Carbazole	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	***890***	ND	ND
Chrysene	110000	1500	110	88	240	160	490	730	220	ND	870	160	***5200***	1000	660
Fluoranthene	2400000	3400	130	190	290	250	1100	1300	400	100	1100	300	***9400***	1900	960
Fluorene	2400000	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	***380***	ND	ND
Indeno(1,2,3-c,d)pyrene	1100	690	ND	ND	150	ND	340	490	150	ND	270	87	***2000***	560	430
Naphthalene	200	430	ND	ND	480	ND	400	350	210	120	***3900***	91	***1600***	***880***	370
Phenanthrene	NA	2400	ND	140	430	170	760	650	230	120	***2800***	160	***9100***	1300	500
Pyrene	1800000	2700	130	170	260	220	950	1200	380	100	1100	240	***8400***	1600	980

Key
EPA RSL - EPA Regional Screening Levels
xxx - elevated above the RSL
xxx - elevated above the background/control sample
All concentrations are in micrograms/kilogram

Table 2

Mountain View Baptist Neighborhood Sampling — Round 1 — Deep Soil

		Background	Background								DOT Near Rail		Behind Church		
Parameters	EPA RSLs	BRS 013-COGD	BRS 014-COGD	BRS-001-MVBD	BRS-002-MVBD	BRS 003-MVBD	BRS 004-MVBD	BRS 005-MVBD	BRS 006-MVBD	BRS-007-MVBD	BRS 008-DOTD	BRS 009-MVBD	BRS 010-MVBD	BRS 011-MVBD	BRS 012-MVBD
2-Methylnaphthalene	240000	430	ND	ND	510	ND	150	420	110	290	2300	ND	470	ND	250
Acenaphthene	3600000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NA	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	160	ND	ND
Acetophenone	7800000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	18000000	350	ND	ND	ND	ND	ND	ND	ND	200	ND	ND	ND	ND	ND
Benzo(a)anthracene	1100	1200	ND	95	ND	ND	140	83	100	410	310	ND	630	ND	240
Benzo(a)pyrene	110	1600	ND	100	180	ND	120	110	110	500	370	ND	780	91	320
Benzo(b)fluoranthene	1100	2200	ND	120	220	ND	150	170	160	680	500	ND	940	130	400
Benzo(g,h,i)perylene	NA	560	ND	ND	250	ND	94	98	ND	220	150	ND	340	ND	230
Benzo(k)fluoranthene	11000	720	ND	ND	ND	ND	ND	ND	ND	180	240	ND	470	ND	140
Carbazole	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	110000	1400	ND	87	210	ND	120	120	110	460	310	ND	690	ND	300
Fluoranthene	2400000	2900	ND	190	ND	ND	190	110	170	1100	440	79	1000	110	430
Fluorene	2400000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	1100	580	ND	ND	ND	ND	ND	90	ND	200	ND	ND	340	ND	190
Naphthalene	200	400	ND	ND	380	ND	110	290	97	230	***1700***	ND	400	ND	210
Phenanthrene	NA	1800	ND	120	200	ND	130	160	110	1000	1000	ND	640	86	240
Pyrene	1800000	2300	ND	160	ND	ND	190	120	150	840	450	ND	930	90	410

Key
EPA RSL - EPA Regional Screening Levels
xxx - elevated above the RSL
xxx - elevated above the background/control sample
All concentrations are in micrograms/kilogram

Table 3

Mountain View Baptist Neighborhood Sampling | Round 2 | Shallow Soil

Sampling Event 2 Shallow

Parameters	EPA RSLs	BRS-201-MVBS	BRS 202-MVBS	BRS 203-MVBS	BRS 204-MVBS	BRS 205-MVBS	BRS 206-MVBS	BRS 207-MVBS
2-Methylnaphthalene	240000	170	ND	ND	110	180	410	140
Acenaphthene	3600000	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NA	ND	ND	ND	ND	ND	86	ND
Acetophenone	7800000	ND	ND	ND	ND	ND	ND	ND
Anthracene	18000000	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1100	410	180	220	240	230	380	280
Benzo(a)pyrene	110	470	210	200	300	290	490	360
Benzo(b)fluoranthene	1100	750	350	390	470	380	760	500
Benzo(g,h,i)perylene	NA	310	120	ND	140	150	180	230
Benzo(k)fluoranthene	11000	280	100	ND	150	160	230	160
Carbazole	NA	ND	ND	ND	ND	ND	ND	ND
Chrysene	110000	450	210	150	300	280	440	340
Fluoranthene	2400000	690	290	280	440	400	770	460
Fluorene	2400000	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	1100	280	110	ND	130	150	170	210
Naphthalene	200	ND	ND	ND	100	120	330	110
Phenanthrene	NA	270	85	ND	190	190	570	190
Pyrene	1800000	610	270	250	400	380	710	400

Key

EPA RSL - EPA Regional Screening Levels

xxx - elevated above the RSL

xxx - elevated above the background/control sample

All concentrations are in micrograms/kilogram

Table 4

Mountain View Baptist Neighborhood Sampling | Round 2 | Deep Soil

Sampling Event 2 Deep

Parameters	EPA RSLs	BRS 201-MVBD	BRS-202-MVBD	BRS 203-MVBD	BRS 204-MVBD	BRS 205-MVBD	BRS 206-MVBD	BRS 207-MVBD
2-Methylnaphthalene	240000	20	ND	ND	ND	110	35	ND
Acenaphthene	3600000	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NA	ND	ND	ND	ND	ND	ND	ND
Acetophenone	7800000	ND	ND	ND	ND	ND	ND	ND
Anthracene	18000000	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1100	46	16	ND	18	240	44	23
Benzo(a)pyrene	110	59	ND	ND	17	260	54	23
Benzo(b)fluoranthene	1100	83	30	26	33	330	74	38
Benzo(g,h,i)perylene	NA	36	ND	ND	ND	99	18	16
Benzo(k)fluoranthene	11000	25	ND	ND	ND	130	24	ND
Carbazole	NA	ND	ND	ND	ND	ND	ND	ND
Chrysene	110000	42	ND	ND	15	260	45	18
Fluoranthene	2400000	73	19	17	21	400	77	28
Fluorene	2400000	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	1100	30	ND	ND	ND	100	18	ND
Naphthalene	200	18	ND	ND	ND	98	26	ND
Phenanthrene	NA	27	ND	ND	ND	160	50	ND
Pyrene	1800000	68	17	15	20	360	76	25

Key

EPA RSL - EPA Regional Screening Levels

xxx - elevated above the RSL

xxx - elevated above the background/control sample

All concentrations are in micrograms/kilogram

Appendix 1

Laboratory Data

Report of Analysis

AECOM
10 Patewood Drive
Building 6, Suite 500
Greenville, SC 29615
Attention: Mark Hartford

Project Name: CSXT Bramlette Road Site

Lot Number:**WC23067**

Date Completed:04/05/2021

04/06/2021 5:48 PM
Approved and released by:
Project Manager II: **Marcia K. McGinnity**

The electronic signature above is the equivalent of a handwritten signature.

Case Narrative
AECOM
Lot Number: WC23067

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

Issues:

Samples WC23067-022 and WC23067-028 were diluted due to appearance or color . All other dilutions are due to target analyte concentrations. The LOQs have been elevated to reflect the dilution factor.

One or more recoveries and/or relative percent differences exceeded control limits in the matrix spike/matrix spike duplicate performed on samples WC23067-001 and WC23067-009. Results are qualified accordingly.

Sample Summary
AECOM
Lot Number: WC23067

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	BRS-001-MVBS	Solid	03/23/2021 1058	03/23/2021
002	BRS-001-MVBD	Solid	03/23/2021 1101	03/23/2021
003	BRS-002-MVBS	Solid	03/23/2021 1118	03/23/2021
004	BRS-002-MVBD	Solid	03/23/2021 1125	03/23/2021
005	BRS-007-MVBS	Solid	03/23/2021 1208	03/23/2021
006	BRS-007-MVBD	Solid	03/23/2021 1212	03/23/2021
007	BRS-011-MVBS	Solid	03/23/2021 1138	03/23/2021
008	BRS 011-MVBD	Solid	03/23/2021 1140	03/23/2021
009	BRS 012-MVBS	Solid	03/23/2021 1220	03/23/2021
010	BRS 012-MVBD	Solid	03/23/2021 1221	03/23/2021
011	BRS 004-MVBS	Solid	03/23/2021 1110	03/23/2021
012	BRS 004-MVBD	Solid	03/23/2021 1125	03/23/2021
013	BRS 005-MVBS	Solid	03/23/2021 1200	03/23/2021
014	BRS 005-MVBD	Solid	03/23/2021 1205	03/23/2021
015	BRS 006-MVBS	Solid	03/23/2021 1050	03/23/2021
016	BRS 006-MVBD	Solid	03/23/2021 1055	03/23/2021
017	BRS 009-MVBS	Solid	03/23/2021 1215	03/23/2021
018	BRS 009-MVBD	Solid	03/23/2021 1220	03/23/2021
019	BRS 010-MVBS	Solid	03/23/2021 1138	03/23/2021
020	BRS 010-MVBD	Solid	03/23/2021 1145	03/23/2021
021	BRS 003-MVBS	Solid	03/23/2021 1251	03/23/2021
022	BRS 003-MVBD	Solid	03/23/2021 1254	03/23/2021
023	BRS 008-DOTS	Solid	03/23/2021 1238	03/23/2021
024	BRS 008-DOTD	Solid	03/23/2021 1241	03/23/2021
025	BRS 013-COGS	Solid	03/23/2021 1235	03/23/2021
026	BRS 013-COGD	Solid	03/23/2021 1240	03/23/2021
027	BRS 014-COGS	Solid	03/23/2021 1255	03/23/2021
028	BRS 014-COGD	Solid	03/23/2021 1300	03/23/2021

(28 samples)

Detection Summary

AECOM

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	BRS-001-MVBS	Solid	Benzo(a)anthracene	8270E	120		ug/kg	10
001	BRS-001-MVBS	Solid	Benzo(a)pyrene	8270E	120		ug/kg	10
001	BRS-001-MVBS	Solid	Benzo(b)fluoranthene	8270E	130		ug/kg	10
001	BRS-001-MVBS	Solid	Chrysene	8270E	88		ug/kg	10
001	BRS-001-MVBS	Solid	Fluoranthene	8270E	190		ug/kg	10
001	BRS-001-MVBS	Solid	2-Methylnaphthalene	8270E	94		ug/kg	11
001	BRS-001-MVBS	Solid	Phenanthrene	8270E	140		ug/kg	11
001	BRS-001-MVBS	Solid	Pyrene	8270E	170		ug/kg	11
002	BRS-001-MVBD	Solid	Benzo(a)anthracene	8270E	95		ug/kg	12
002	BRS-001-MVBD	Solid	Benzo(a)pyrene	8270E	100		ug/kg	12
002	BRS-001-MVBD	Solid	Benzo(b)fluoranthene	8270E	120		ug/kg	12
002	BRS-001-MVBD	Solid	Chrysene	8270E	87		ug/kg	12
002	BRS-001-MVBD	Solid	Fluoranthene	8270E	190		ug/kg	12
002	BRS-001-MVBD	Solid	Phenanthrene	8270E	120		ug/kg	13
002	BRS-001-MVBD	Solid	Pyrene	8270E	160		ug/kg	13
003	BRS-002-MVBS	Solid	Benzo(a)anthracene	8270E	180		ug/kg	14
003	BRS-002-MVBS	Solid	Benzo(a)pyrene	8270E	250		ug/kg	14
003	BRS-002-MVBS	Solid	Benzo(b)fluoranthene	8270E	430		ug/kg	14
003	BRS-002-MVBS	Solid	Benzo(g,h,i)perylene	8270E	190		ug/kg	14
003	BRS-002-MVBS	Solid	Chrysene	8270E	240		ug/kg	14
003	BRS-002-MVBS	Solid	Fluoranthene	8270E	290		ug/kg	14
003	BRS-002-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	150		ug/kg	15
003	BRS-002-MVBS	Solid	2-Methylnaphthalene	8270E	670		ug/kg	15
003	BRS-002-MVBS	Solid	Naphthalene	8270E	480		ug/kg	15
003	BRS-002-MVBS	Solid	Phenanthrene	8270E	430		ug/kg	15
003	BRS-002-MVBS	Solid	Pyrene	8270E	260		ug/kg	15
004	BRS-002-MVBD	Solid	Benzo(a)pyrene	8270E	180		ug/kg	16
004	BRS-002-MVBD	Solid	Benzo(b)fluoranthene	8270E	220		ug/kg	16
004	BRS-002-MVBD	Solid	Benzo(g,h,i)perylene	8270E	250		ug/kg	16
004	BRS-002-MVBD	Solid	Chrysene	8270E	210		ug/kg	16
004	BRS-002-MVBD	Solid	2-Methylnaphthalene	8270E	510		ug/kg	17
004	BRS-002-MVBD	Solid	Naphthalene	8270E	380		ug/kg	17
004	BRS-002-MVBD	Solid	Phenanthrene	8270E	200		ug/kg	17
005	BRS-007-MVBS	Solid	Benzo(b)fluoranthene	8270E	79		ug/kg	18
005	BRS-007-MVBS	Solid	Fluoranthene	8270E	100		ug/kg	18
005	BRS-007-MVBS	Solid	2-Methylnaphthalene	8270E	180		ug/kg	19
005	BRS-007-MVBS	Solid	Naphthalene	8270E	120		ug/kg	19
005	BRS-007-MVBS	Solid	Phenanthrene	8270E	120		ug/kg	19
005	BRS-007-MVBS	Solid	Pyrene	8270E	100		ug/kg	19
006	BRS-007-MVBD	Solid	Anthracene	8270E	200		ug/kg	20
006	BRS-007-MVBD	Solid	Benzo(a)anthracene	8270E	410		ug/kg	20
006	BRS-007-MVBD	Solid	Benzo(a)pyrene	8270E	500		ug/kg	20
006	BRS-007-MVBD	Solid	Benzo(b)fluoranthene	8270E	680		ug/kg	20
006	BRS-007-MVBD	Solid	Benzo(g,h,i)perylene	8270E	220		ug/kg	20
006	BRS-007-MVBD	Solid	Benzo(k)fluoranthene	8270E	180		ug/kg	20

Detection Summary (Continued)

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	BRS-007-MVBD	Solid	Chrysene	8270E	460		ug/kg	20
006	BRS-007-MVBD	Solid	Fluoranthene	8270E	1100		ug/kg	20
006	BRS-007-MVBD	Solid	Indeno(1,2,3-c,d)pyrene	8270E	200		ug/kg	21
006	BRS-007-MVBD	Solid	2-Methylnaphthalene	8270E	290		ug/kg	21
006	BRS-007-MVBD	Solid	Naphthalene	8270E	230		ug/kg	21
006	BRS-007-MVBD	Solid	Phenanthrene	8270E	1000		ug/kg	21
006	BRS-007-MVBD	Solid	Pyrene	8270E	840		ug/kg	21
007	BRS-011-MVBS	Solid	Acenaphthylene	8270E	220		ug/kg	22
007	BRS-011-MVBS	Solid	Anthracene	8270E	360		ug/kg	22
007	BRS-011-MVBS	Solid	Benzo(a)anthracene	8270E	1000		ug/kg	22
007	BRS-011-MVBS	Solid	Benzo(a)pyrene	8270E	1400		ug/kg	22
007	BRS-011-MVBS	Solid	Benzo(b)fluoranthene	8270E	2100		ug/kg	22
007	BRS-011-MVBS	Solid	Benzo(g,h,i)perylene	8270E	530		ug/kg	22
007	BRS-011-MVBS	Solid	Benzo(k)fluoranthene	8270E	820		ug/kg	22
007	BRS-011-MVBS	Solid	Chrysene	8270E	1000		ug/kg	22
007	BRS-011-MVBS	Solid	Fluoranthene	8270E	1900		ug/kg	22
007	BRS-011-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	560		ug/kg	23
007	BRS-011-MVBS	Solid	2-Methylnaphthalene	8270E	1100		ug/kg	23
007	BRS-011-MVBS	Solid	Naphthalene	8270E	880		ug/kg	23
007	BRS-011-MVBS	Solid	Phenanthrene	8270E	1300		ug/kg	23
007	BRS-011-MVBS	Solid	Pyrene	8270E	1600		ug/kg	23
008	BRS 011-MVBD	Solid	Benzo(a)pyrene	8270E	91		ug/kg	24
008	BRS 011-MVBD	Solid	Benzo(b)fluoranthene	8270E	130		ug/kg	24
008	BRS 011-MVBD	Solid	Fluoranthene	8270E	110		ug/kg	24
008	BRS 011-MVBD	Solid	Phenanthrene	8270E	86		ug/kg	25
008	BRS 011-MVBD	Solid	Pyrene	8270E	90		ug/kg	25
009	BRS 012-MVBS	Solid	Anthracene	8270E	95		ug/kg	26
009	BRS 012-MVBS	Solid	Benzo(a)anthracene	8270E	590		ug/kg	26
009	BRS 012-MVBS	Solid	Benzo(a)pyrene	8270E	800		ug/kg	26
009	BRS 012-MVBS	Solid	Benzo(b)fluoranthene	8270E	910	S	ug/kg	26
009	BRS 012-MVBS	Solid	Benzo(g,h,i)perylene	8270E	530	S	ug/kg	26
009	BRS 012-MVBS	Solid	Benzo(k)fluoranthene	8270E	430		ug/kg	26
009	BRS 012-MVBS	Solid	Chrysene	8270E	660		ug/kg	26
009	BRS 012-MVBS	Solid	Fluoranthene	8270E	960		ug/kg	26
009	BRS 012-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	430	S	ug/kg	27
009	BRS 012-MVBS	Solid	2-Methylnaphthalene	8270E	420		ug/kg	27
009	BRS 012-MVBS	Solid	Naphthalene	8270E	370		ug/kg	27
009	BRS 012-MVBS	Solid	Phenanthrene	8270E	500		ug/kg	27
009	BRS 012-MVBS	Solid	Pyrene	8270E	980		ug/kg	27
010	BRS 012-MVBD	Solid	Benzo(a)anthracene	8270E	240		ug/kg	28
010	BRS 012-MVBD	Solid	Benzo(a)pyrene	8270E	320		ug/kg	28
010	BRS 012-MVBD	Solid	Benzo(b)fluoranthene	8270E	400		ug/kg	28
010	BRS 012-MVBD	Solid	Benzo(g,h,i)perylene	8270E	230		ug/kg	28
010	BRS 012-MVBD	Solid	Benzo(k)fluoranthene	8270E	140		ug/kg	28
010	BRS 012-MVBD	Solid	Chrysene	8270E	300		ug/kg	28
010	BRS 012-MVBD	Solid	Fluoranthene	8270E	430		ug/kg	28
010	BRS 012-MVBD	Solid	Indeno(1,2,3-c,d)pyrene	8270E	190		ug/kg	29
010	BRS 012-MVBD	Solid	2-Methylnaphthalene	8270E	250		ug/kg	29

Detection Summary (Continued)

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
010	BRS 012-MVBD	Solid	Naphthalene	8270E	210		ug/kg	29
010	BRS 012-MVBD	Solid	Phenanthrene	8270E	240		ug/kg	29
010	BRS 012-MVBD	Solid	Pyrene	8270E	410		ug/kg	29
011	BRS 004-MVBS	Solid	Anthracene	8270E	150		ug/kg	30
011	BRS 004-MVBS	Solid	Benzo(a)anthracene	8270E	520		ug/kg	30
011	BRS 004-MVBS	Solid	Benzo(a)pyrene	8270E	620		ug/kg	30
011	BRS 004-MVBS	Solid	Benzo(b)fluoranthene	8270E	900		ug/kg	30
011	BRS 004-MVBS	Solid	Benzo(g,h,i)perylene	8270E	400		ug/kg	30
011	BRS 004-MVBS	Solid	Benzo(k)fluoranthene	8270E	230		ug/kg	30
011	BRS 004-MVBS	Solid	Chrysene	8270E	490		ug/kg	30
011	BRS 004-MVBS	Solid	Fluoranthene	8270E	1100		ug/kg	30
011	BRS 004-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	340		ug/kg	31
011	BRS 004-MVBS	Solid	2-Methylnaphthalene	8270E	520		ug/kg	31
011	BRS 004-MVBS	Solid	Naphthalene	8270E	400		ug/kg	31
011	BRS 004-MVBS	Solid	Phenanthrene	8270E	760		ug/kg	31
011	BRS 004-MVBS	Solid	Pyrene	8270E	950		ug/kg	31
012	BRS 004-MVBD	Solid	Benzo(a)anthracene	8270E	140		ug/kg	32
012	BRS 004-MVBD	Solid	Benzo(a)pyrene	8270E	120		ug/kg	32
012	BRS 004-MVBD	Solid	Benzo(b)fluoranthene	8270E	150		ug/kg	32
012	BRS 004-MVBD	Solid	Benzo(g,h,i)perylene	8270E	94		ug/kg	32
012	BRS 004-MVBD	Solid	Chrysene	8270E	120		ug/kg	32
012	BRS 004-MVBD	Solid	Fluoranthene	8270E	190		ug/kg	32
012	BRS 004-MVBD	Solid	2-Methylnaphthalene	8270E	150		ug/kg	33
012	BRS 004-MVBD	Solid	Naphthalene	8270E	110		ug/kg	33
012	BRS 004-MVBD	Solid	Phenanthrene	8270E	130		ug/kg	33
012	BRS 004-MVBD	Solid	Pyrene	8270E	190		ug/kg	33
013	BRS 005-MVBS	Solid	Benzo(a)anthracene	8270E	680		ug/kg	34
013	BRS 005-MVBS	Solid	Benzo(a)pyrene	8270E	830		ug/kg	34
013	BRS 005-MVBS	Solid	Benzo(b)fluoranthene	8270E	1000		ug/kg	34
013	BRS 005-MVBS	Solid	Benzo(g,h,i)perylene	8270E	520		ug/kg	34
013	BRS 005-MVBS	Solid	Benzo(k)fluoranthene	8270E	400		ug/kg	34
013	BRS 005-MVBS	Solid	Chrysene	8270E	730		ug/kg	34
013	BRS 005-MVBS	Solid	Fluoranthene	8270E	1300		ug/kg	34
013	BRS 005-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	490		ug/kg	35
013	BRS 005-MVBS	Solid	2-Methylnaphthalene	8270E	390		ug/kg	35
013	BRS 005-MVBS	Solid	Naphthalene	8270E	350		ug/kg	35
013	BRS 005-MVBS	Solid	Phenanthrene	8270E	650		ug/kg	35
013	BRS 005-MVBS	Solid	Pyrene	8270E	1200		ug/kg	35
014	BRS 005-MVBD	Solid	Benzo(a)anthracene	8270E	83		ug/kg	36
014	BRS 005-MVBD	Solid	Benzo(a)pyrene	8270E	110		ug/kg	36
014	BRS 005-MVBD	Solid	Benzo(b)fluoranthene	8270E	170		ug/kg	36
014	BRS 005-MVBD	Solid	Benzo(g,h,i)perylene	8270E	98		ug/kg	36
014	BRS 005-MVBD	Solid	Chrysene	8270E	120		ug/kg	36
014	BRS 005-MVBD	Solid	Fluoranthene	8270E	110		ug/kg	36
014	BRS 005-MVBD	Solid	Indeno(1,2,3-c,d)pyrene	8270E	90		ug/kg	37
014	BRS 005-MVBD	Solid	2-Methylnaphthalene	8270E	420		ug/kg	37
014	BRS 005-MVBD	Solid	Naphthalene	8270E	290		ug/kg	37
014	BRS 005-MVBD	Solid	Phenanthrene	8270E	160		ug/kg	37

Detection Summary (Continued)

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
014	BRS 005-MVBD	Solid	Pyrene	8270E	120		ug/kg	37
015	BRS 006-MVBS	Solid	Benzo(a)anthracene	8270E	280		ug/kg	38
015	BRS 006-MVBS	Solid	Benzo(a)pyrene	8270E	280		ug/kg	38
015	BRS 006-MVBS	Solid	Benzo(b)fluoranthene	8270E	460		ug/kg	38
015	BRS 006-MVBS	Solid	Benzo(g,h,i)perylene	8270E	150		ug/kg	38
015	BRS 006-MVBS	Solid	Chrysene	8270E	220		ug/kg	38
015	BRS 006-MVBS	Solid	Fluoranthene	8270E	400		ug/kg	38
015	BRS 006-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	150		ug/kg	39
015	BRS 006-MVBS	Solid	2-Methylnaphthalene	8270E	280		ug/kg	39
015	BRS 006-MVBS	Solid	Naphthalene	8270E	210		ug/kg	39
015	BRS 006-MVBS	Solid	Phenanthrene	8270E	230		ug/kg	39
015	BRS 006-MVBS	Solid	Pyrene	8270E	380		ug/kg	39
016	BRS 006-MVBD	Solid	Benzo(a)anthracene	8270E	100		ug/kg	40
016	BRS 006-MVBD	Solid	Benzo(a)pyrene	8270E	110		ug/kg	40
016	BRS 006-MVBD	Solid	Benzo(b)fluoranthene	8270E	160		ug/kg	40
016	BRS 006-MVBD	Solid	Chrysene	8270E	110		ug/kg	40
016	BRS 006-MVBD	Solid	Fluoranthene	8270E	170		ug/kg	40
016	BRS 006-MVBD	Solid	2-Methylnaphthalene	8270E	110		ug/kg	41
016	BRS 006-MVBD	Solid	Naphthalene	8270E	97		ug/kg	41
016	BRS 006-MVBD	Solid	Phenanthrene	8270E	110		ug/kg	41
016	BRS 006-MVBD	Solid	Pyrene	8270E	150		ug/kg	41
017	BRS 009-MVBS	Solid	Benzo(a)anthracene	8270E	170		ug/kg	42
017	BRS 009-MVBS	Solid	Benzo(a)pyrene	8270E	210		ug/kg	42
017	BRS 009-MVBS	Solid	Benzo(b)fluoranthene	8270E	230		ug/kg	42
017	BRS 009-MVBS	Solid	Benzo(g,h,i)perylene	8270E	100		ug/kg	42
017	BRS 009-MVBS	Solid	Benzo(k)fluoranthene	8270E	110		ug/kg	42
017	BRS 009-MVBS	Solid	Chrysene	8270E	160		ug/kg	42
017	BRS 009-MVBS	Solid	Fluoranthene	8270E	300		ug/kg	42
017	BRS 009-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	87		ug/kg	43
017	BRS 009-MVBS	Solid	2-Methylnaphthalene	8270E	110		ug/kg	43
017	BRS 009-MVBS	Solid	Naphthalene	8270E	91		ug/kg	43
017	BRS 009-MVBS	Solid	Phenanthrene	8270E	160		ug/kg	43
017	BRS 009-MVBS	Solid	Pyrene	8270E	240		ug/kg	43
018	BRS 009-MVBD	Solid	Fluoranthene	8270E	79		ug/kg	44
019	BRS 010-MVBS	Solid	Acenaphthylene	8270E	1100		ug/kg	46
019	BRS 010-MVBS	Solid	Anthracene	8270E	840		ug/kg	46
019	BRS 010-MVBS	Solid	Benzo(a)anthracene	8270E	3900		ug/kg	46
019	BRS 010-MVBS	Solid	Benzo(a)pyrene	8270E	5300		ug/kg	46
019	BRS 010-MVBS	Solid	Benzo(b)fluoranthene	8270E	7800		ug/kg	46
019	BRS 010-MVBS	Solid	Benzo(g,h,i)perylene	8270E	1900		ug/kg	46
019	BRS 010-MVBS	Solid	Benzo(k)fluoranthene	8270E	3000		ug/kg	46
019	BRS 010-MVBS	Solid	Carbazole	8270E	890		ug/kg	46
019	BRS 010-MVBS	Solid	Chrysene	8270E	5200		ug/kg	46
019	BRS 010-MVBS	Solid	Dibenzofuran	8270E	900		ug/kg	46
019	BRS 010-MVBS	Solid	Fluoranthene	8270E	9400		ug/kg	46
019	BRS 010-MVBS	Solid	Fluorene	8270E	380		ug/kg	46
019	BRS 010-MVBS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	2000		ug/kg	47
019	BRS 010-MVBS	Solid	2-Methylnaphthalene	8270E	1000		ug/kg	47

Detection Summary (Continued)

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
019	BRS 010-MVBS	Solid	Naphthalene	8270E	1600		ug/kg	47
019	BRS 010-MVBS	Solid	Phenanthrene	8270E	9100		ug/kg	47
019	BRS 010-MVBS	Solid	Pyrene	8270E	8400		ug/kg	47
020	BRS 010-MVBD	Solid	Acenaphthylene	8270E	160		ug/kg	48
020	BRS 010-MVBD	Solid	Benzo(a)anthracene	8270E	630		ug/kg	48
020	BRS 010-MVBD	Solid	Benzo(a)pyrene	8270E	780		ug/kg	48
020	BRS 010-MVBD	Solid	Benzo(b)fluoranthene	8270E	940		ug/kg	48
020	BRS 010-MVBD	Solid	Benzo(g,h,i)perylene	8270E	340		ug/kg	48
020	BRS 010-MVBD	Solid	Benzo(k)fluoranthene	8270E	470		ug/kg	48
020	BRS 010-MVBD	Solid	Chrysene	8270E	690		ug/kg	48
020	BRS 010-MVBD	Solid	Fluoranthene	8270E	1000		ug/kg	48
020	BRS 010-MVBD	Solid	Indeno(1,2,3-c,d)pyrene	8270E	340		ug/kg	49
020	BRS 010-MVBD	Solid	2-Methylnaphthalene	8270E	470		ug/kg	49
020	BRS 010-MVBD	Solid	Naphthalene	8270E	400		ug/kg	49
020	BRS 010-MVBD	Solid	Phenanthrene	8270E	640		ug/kg	49
020	BRS 010-MVBD	Solid	Pyrene	8270E	930		ug/kg	49
021	BRS 003-MVBS	Solid	Benzo(a)anthracene	8270E	170		ug/kg	50
021	BRS 003-MVBS	Solid	Benzo(a)pyrene	8270E	200		ug/kg	50
021	BRS 003-MVBS	Solid	Benzo(b)fluoranthene	8270E	280		ug/kg	50
021	BRS 003-MVBS	Solid	Chrysene	8270E	160		ug/kg	50
021	BRS 003-MVBS	Solid	Fluoranthene	8270E	250		ug/kg	50
021	BRS 003-MVBS	Solid	Phenanthrene	8270E	170		ug/kg	51
021	BRS 003-MVBS	Solid	Pyrene	8270E	220		ug/kg	51
023	BRS 008-DOTS	Solid	Acenaphthylene	8270E	200		ug/kg	54
023	BRS 008-DOTS	Solid	Acetophenone	8270E	830		ug/kg	54
023	BRS 008-DOTS	Solid	Anthracene	8270E	220		ug/kg	54
023	BRS 008-DOTS	Solid	Benzo(a)anthracene	8270E	610		ug/kg	54
023	BRS 008-DOTS	Solid	Benzo(a)pyrene	8270E	670		ug/kg	54
023	BRS 008-DOTS	Solid	Benzo(b)fluoranthene	8270E	1200		ug/kg	54
023	BRS 008-DOTS	Solid	Benzo(g,h,i)perylene	8270E	310		ug/kg	54
023	BRS 008-DOTS	Solid	Benzo(k)fluoranthene	8270E	280		ug/kg	54
023	BRS 008-DOTS	Solid	Chrysene	8270E	870		ug/kg	54
023	BRS 008-DOTS	Solid	Dibenzofuran	8270E	1200		ug/kg	54
023	BRS 008-DOTS	Solid	Fluoranthene	8270E	1100		ug/kg	54
023	BRS 008-DOTS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	270		ug/kg	55
023	BRS 008-DOTS	Solid	2-Methylnaphthalene	8270E	5400		ug/kg	55
023	BRS 008-DOTS	Solid	Naphthalene	8270E	3900		ug/kg	55
023	BRS 008-DOTS	Solid	Phenanthrene	8270E	2800		ug/kg	55
023	BRS 008-DOTS	Solid	Pyrene	8270E	1100		ug/kg	55
024	BRS 008-DOTD	Solid	Benzo(a)anthracene	8270E	310		ug/kg	56
024	BRS 008-DOTD	Solid	Benzo(a)pyrene	8270E	370		ug/kg	56
024	BRS 008-DOTD	Solid	Benzo(b)fluoranthene	8270E	500		ug/kg	56
024	BRS 008-DOTD	Solid	Benzo(g,h,i)perylene	8270E	150		ug/kg	56
024	BRS 008-DOTD	Solid	Benzo(k)fluoranthene	8270E	240		ug/kg	56
024	BRS 008-DOTD	Solid	Chrysene	8270E	310		ug/kg	56
024	BRS 008-DOTD	Solid	Fluoranthene	8270E	440		ug/kg	56
024	BRS 008-DOTD	Solid	2-Methylnaphthalene	8270E	2300		ug/kg	57
024	BRS 008-DOTD	Solid	Naphthalene	8270E	1700		ug/kg	57

Detection Summary (Continued)

Lot Number: WC23067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
024	BRS 008-DOTD	Solid	Phenanthrene	8270E	1000		ug/kg	57
024	BRS 008-DOTD	Solid	Pyrene	8270E	450		ug/kg	57
025	BRS 013-COGS	Solid	Acenaphthene	8270E	150		ug/kg	58
025	BRS 013-COGS	Solid	Acenaphthylene	8270E	340		ug/kg	58
025	BRS 013-COGS	Solid	Anthracene	8270E	510		ug/kg	58
025	BRS 013-COGS	Solid	Benzo(a)anthracene	8270E	1400		ug/kg	58
025	BRS 013-COGS	Solid	Benzo(a)pyrene	8270E	1900		ug/kg	58
025	BRS 013-COGS	Solid	Benzo(b)fluoranthene	8270E	2300		ug/kg	58
025	BRS 013-COGS	Solid	Benzo(g,h,i)perylene	8270E	620		ug/kg	58
025	BRS 013-COGS	Solid	Benzo(k)fluoranthene	8270E	900		ug/kg	58
025	BRS 013-COGS	Solid	Chrysene	8270E	1500		ug/kg	58
025	BRS 013-COGS	Solid	Fluoranthene	8270E	3400		ug/kg	58
025	BRS 013-COGS	Solid	Fluorene	8270E	190		ug/kg	58
025	BRS 013-COGS	Solid	Indeno(1,2,3-c,d)pyrene	8270E	690		ug/kg	59
025	BRS 013-COGS	Solid	2-Methylnaphthalene	8270E	430		ug/kg	59
025	BRS 013-COGS	Solid	Naphthalene	8270E	430		ug/kg	59
025	BRS 013-COGS	Solid	Phenanthrene	8270E	2400		ug/kg	59
025	BRS 013-COGS	Solid	Pyrene	8270E	2700		ug/kg	59
026	BRS 013-COGD	Solid	Acenaphthylene	8270E	180		ug/kg	60
026	BRS 013-COGD	Solid	Anthracene	8270E	350		ug/kg	60
026	BRS 013-COGD	Solid	Benzo(a)anthracene	8270E	1200		ug/kg	60
026	BRS 013-COGD	Solid	Benzo(a)pyrene	8270E	1600		ug/kg	60
026	BRS 013-COGD	Solid	Benzo(b)fluoranthene	8270E	2200		ug/kg	60
026	BRS 013-COGD	Solid	Benzo(g,h,i)perylene	8270E	560		ug/kg	60
026	BRS 013-COGD	Solid	Benzo(k)fluoranthene	8270E	720		ug/kg	60
026	BRS 013-COGD	Solid	Chrysene	8270E	1400		ug/kg	60
026	BRS 013-COGD	Solid	Fluoranthene	8270E	2900		ug/kg	60
026	BRS 013-COGD	Solid	Indeno(1,2,3-c,d)pyrene	8270E	580		ug/kg	61
026	BRS 013-COGD	Solid	2-Methylnaphthalene	8270E	430		ug/kg	61
026	BRS 013-COGD	Solid	Naphthalene	8270E	400		ug/kg	61
026	BRS 013-COGD	Solid	Phenanthrene	8270E	1800		ug/kg	61
026	BRS 013-COGD	Solid	Pyrene	8270E	2300		ug/kg	61
027	BRS 014-COGS	Solid	Benzo(a)anthracene	8270E	100		ug/kg	62
027	BRS 014-COGS	Solid	Benzo(a)pyrene	8270E	85		ug/kg	62
027	BRS 014-COGS	Solid	Benzo(b)fluoranthene	8270E	160		ug/kg	62
027	BRS 014-COGS	Solid	Chrysene	8270E	110		ug/kg	62
027	BRS 014-COGS	Solid	Fluoranthene	8270E	130		ug/kg	62
027	BRS 014-COGS	Solid	Pyrene	8270E	130		ug/kg	63

(275 detections)

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-001-MVBS**
Date Sampled: **03/23/2021 1058**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-001**
Matrix: **Solid**
% Solids: **81.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2310	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		78	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		78	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		78	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**120**		**78**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**120**		**78**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**130**		**78**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		78	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		78	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND		390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**88**		**78**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		78	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND	S	390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND	S	1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		760	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		760	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		760	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		760	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**190**		**78**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		78	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-001-MVBS**
Date Sampled: **03/23/2021 1058**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-001**
Matrix: **Solid**
% Solids: **81.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2310	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND	S	1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		78	ug/kg	1
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**94**		**78**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		760	ug/kg	1
Naphthalene	91-20-3	8270E	ND		78	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		760	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND	S	760	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND	S	760	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		760	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**140**		**78**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**170**		**78**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		760	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		61	12-144
Phenol-d5		77	26-148
Terphenyl-d14		79	20-127
2,4,6-Tribromophenol		77	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-001-MVBD**
Date Sampled: **03/23/2021 1101**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-002**
Matrix: **Solid**
% Solids: **90.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2109	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		73	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		73	ug/kg	1
Acetophenone	98-86-2	8270E	ND		370	ug/kg	1
Anthracene	120-12-7	8270E	ND		73	ug/kg	1
Atrazine	1912-24-9	8270E	ND		370	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		370	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**95**		**73**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**100**		**73**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**120**		**73**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		73	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		73	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		370	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		370	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		370	ug/kg	1
Caprolactam	105-60-2	8270E	ND		370	ug/kg	1
Carbazole	86-74-8	8270E	ND		370	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		370	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		370	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		370	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		370	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		370	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		370	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		370	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		370	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**87**		**73**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		73	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		370	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		370	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		370	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		370	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		370	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		370	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		370	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		710	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		710	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		370	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		710	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		710	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**190**		**73**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		73	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		370	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		370	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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B = Detected in the method blank
N = Recovery is out of criteria
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-001-MVBD**
Date Sampled: **03/23/2021 1101**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-002**
Matrix: **Solid**
% Solids: **90.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2109	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		370	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		73	ug/kg	1
Isophorone	78-59-1	8270E	ND		370	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		73	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		370	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		710	ug/kg	1
Naphthalene	91-20-3	8270E	ND		73	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		710	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		710	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		710	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		370	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		710	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		370	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		370	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**120**		**73**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		370	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**160**		**73**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		370	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		710	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		370	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		370	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		74	24-137
2-Fluorophenol		63	16-136
Nitrobenzene-d5		61	12-144
Phenol-d5		60	26-148
Terphenyl-d14		79	20-127
2,4,6-Tribromophenol		80	27-128

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-002-MVBS**
Date Sampled: **03/23/2021 1118**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-003**
Matrix: **Solid**
% Solids: **83.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2133	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		770	ug/kg	1
Anthracene	120-12-7	8270E	ND		150	ug/kg	1
Atrazine	1912-24-9	8270E	ND		770	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		770	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**180**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**250**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**430**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**190**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		150	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		770	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		770	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		770	ug/kg	1
Caprolactam	105-60-2	8270E	ND		770	ug/kg	1
Carbazole	86-74-8	8270E	ND		770	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		770	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		770	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		770	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		770	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		770	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		770	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		770	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		770	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**240**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		770	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		770	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		770	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		770	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		770	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		770	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		770	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		770	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**290**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		770	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		770	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-002-MVBS**
Date Sampled: **03/23/2021 1118**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-003**
Matrix: **Solid**
% Solids: **83.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2133	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		770	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**150**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		770	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**670**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		770	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**480**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		770	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		770	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		770	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**430**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		770	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**260**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		770	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		770	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		770	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		77	24-137
2-Fluorophenol		54	16-136
Nitrobenzene-d5		62	12-144
Phenol-d5		59	26-148
Terphenyl-d14		75	20-127
2,4,6-Tribromophenol		65	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-002-MVBD**
Date Sampled: **03/23/2021 1125**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-004**
Matrix: **Solid**
% Solids: **78.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2157	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		160	ug/kg	1
Acetophenone	98-86-2	8270E	ND		810	ug/kg	1
Anthracene	120-12-7	8270E	ND		160	ug/kg	1
Atrazine	1912-24-9	8270E	ND		810	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		810	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		160	ug/kg	1
Benzo(a)pyrene	**50-32-8**	**8270E**	**180**		**160**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**220**		**160**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**250**		**160**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		160	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		810	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		810	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		810	ug/kg	1
Caprolactam	105-60-2	8270E	ND		810	ug/kg	1
Carbazole	86-74-8	8270E	ND		810	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		810	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		810	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		810	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		810	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		810	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		810	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		810	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		810	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**210**		**160**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		810	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		810	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		810	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		810	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		810	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		810	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		810	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1600	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1600	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		810	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1600	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1600	ug/kg	1
Fluoranthene	206-44-0	8270E	ND		160	ug/kg	1
Fluorene	86-73-7	8270E	ND		160	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		810	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		810	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-002-MVBD**
Date Sampled: **03/23/2021 1125**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-004**
Matrix: **Solid**
% Solids: **78.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2157	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		810	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		160	ug/kg	1
Isophorone	78-59-1	8270E	ND		810	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**510**		**160**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		810	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1600	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**380**		**160**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1600	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1600	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1600	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		810	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1600	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		810	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		810	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**200**		**160**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		810	ug/kg	1
Pyrene	129-00-0	8270E	ND		160	ug/kg	1
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		810	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1600	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		810	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		810	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		71	24-137
2-Fluorophenol		48	16-136
Nitrobenzene-d5		56	12-144
Phenol-d5		50	26-148
Terphenyl-d14		73	20-127
2,4,6-Tribromophenol		55	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-007-MVBS**
Date Sampled: **03/23/2021 1208**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-005**
Matrix: **Solid**
% Solids: **87.5** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2222	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		74	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		74	ug/kg	1
Acetophenone	98-86-2	8270E	ND		380	ug/kg	1
Anthracene	120-12-7	8270E	ND		74	ug/kg	1
Atrazine	1912-24-9	8270E	ND		380	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		380	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		74	ug/kg	1
Benzo(a)pyrene	50-32-8	8270E	ND		74	ug/kg	1
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**79**		**74**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		74	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		74	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		380	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		380	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		380	ug/kg	1
Caprolactam	105-60-2	8270E	ND		380	ug/kg	1
Carbazole	86-74-8	8270E	ND		380	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		380	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		380	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		380	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		380	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		380	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		380	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		380	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		380	ug/kg	1
Chrysene	218-01-9	8270E	ND		74	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		74	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		380	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		380	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		380	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		380	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		380	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		380	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		380	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		730	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		730	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		380	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		730	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		730	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**100**		**74**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		74	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		380	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		380	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-007-MVBS**
Date Sampled: **03/23/2021 1208**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-005**
Matrix: **Solid**
% Solids: **87.5** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/03/2021 2222	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		380	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		74	ug/kg	1
Isophorone	78-59-1	8270E	ND		380	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**180**		**74**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		380	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		730	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**120**		**74**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		730	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		730	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		730	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		380	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		730	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		380	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		380	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**120**		**74**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		380	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**100**		**74**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		380	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		730	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		380	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		380	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		74	24-137
2-Fluorophenol		61	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		62	26-148
Terphenyl-d14		76	20-127
2,4,6-Tribromophenol		79	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-007-MVBD**
Date Sampled: **03/23/2021 1212**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-006**
Matrix: **Solid**
% Solids: **85.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2246	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		740	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**200**		**150**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		740	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		740	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**410**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**500**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**680**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**220**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**180**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		740	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		740	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		740	ug/kg	1
Caprolactam	105-60-2	8270E	ND		740	ug/kg	1
Carbazole	86-74-8	8270E	ND		740	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		740	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		740	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		740	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		740	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		740	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		740	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		740	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		740	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**460**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		740	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		740	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		740	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		740	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		740	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		740	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		740	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1400	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1400	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		740	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1400	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1400	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1100**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		740	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		740	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-007-MVBD**
Date Sampled: **03/23/2021 1212**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-006**
Matrix: **Solid**
% Solids: **85.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/03/2021 2246	SCD	03/25/2021 1035	86800

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3600	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		740	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**200**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		740	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**290**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		740	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1400	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**230**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1400	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1400	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1400	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		740	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1400	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		740	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		740	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3600	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**1000**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		740	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**840**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		740	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1400	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		740	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		740	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		82	24-137
2-Fluorophenol		54	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		47	26-148
Terphenyl-d14		83	20-127
2,4,6-Tribromophenol		80	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-011-MVBS**
Date Sampled: **03/23/2021 1138**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-007**
Matrix: **Solid**
% Solids: **76.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/05/2021 0008	SCD	04/01/2021 1146	87552

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**220**		**160**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		820	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**360**		**160**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		820	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		820	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**1000**		**160**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**1400**		**160**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**2100**		**160**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**530**		**160**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**820**		**160**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		820	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		820	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		820	ug/kg	1
Caprolactam	105-60-2	8270E	ND		820	ug/kg	1
Carbazole	86-74-8	8270E	ND		820	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		820	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		820	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		820	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		820	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		820	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		820	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		820	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		820	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**1000**		**160**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		820	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		820	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		820	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		820	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		820	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		820	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		820	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1600	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1600	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		820	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1600	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1600	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1900**		**160**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		160	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		820	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		820	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-011-MVBS**
Date Sampled: **03/23/2021 1138**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-007**
Matrix: **Solid**
% Solids: **76.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/05/2021 0008	SCD	04/01/2021 1146	87552

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		820	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**560**		**160**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		820	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**1100**		**160**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		820	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1600	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**880**		**160**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1600	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1600	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1600	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		820	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1600	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		820	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		820	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**1300**		**160**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		820	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**1600**		**160**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		820	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1600	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		820	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		820	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		85	24-137
2-Fluorophenol		76	16-136
Nitrobenzene-d5		81	12-144
Phenol-d5		76	26-148
Terphenyl-d14		87	20-127
2,4,6-Tribromophenol		102	27-128

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 011-MVBD**
Date Sampled: **03/23/2021 1140**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-008**
Matrix: **Solid**
% Solids: **84.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/05/2021 0032	SCD	04/01/2021 1146	87552

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		77	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		77	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		77	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		77	ug/kg	1
Benzo(a)pyrene	**50-32-8**	**8270E**	**91**		**77**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**130**		**77**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		77	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		77	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND		390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	218-01-9	8270E	ND		77	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		77	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		750	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		750	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		750	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		750	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**110**		**77**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		77	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 011-MVBD**
Date Sampled: **03/23/2021 1140**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-008**
Matrix: **Solid**
% Solids: **84.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/05/2021 0032	SCD	04/01/2021 1146	87552

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		77	ug/kg	1
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		77	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		750	ug/kg	1
Naphthalene	91-20-3	8270E	ND		77	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		750	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		750	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		750	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		750	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**86**		**77**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**90**		**77**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		750	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		78	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		69	12-144
Phenol-d5		75	26-148
Terphenyl-d14		72	20-127
2,4,6-Tribromophenol		67	27-128

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 012-MVBS**
Date Sampled: **03/23/2021 1220**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-009**
Matrix: **Solid**
% Solids: **78.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1600	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		81	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		81	ug/kg	1
Acetophenone	98-86-2	8270E	ND		410	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**95**		**81**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		410	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		410	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**590**		**81**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**800**		**81**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**910**	**S**	**81**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**530**	**S**	**81**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**430**		**81**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		410	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		410	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		410	ug/kg	1
Caprolactam	105-60-2	8270E	ND		410	ug/kg	1
Carbazole	86-74-8	8270E	ND		410	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		410	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		410	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		410	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		410	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		410	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		410	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		410	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		410	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**660**		**81**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		81	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		410	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND	S	410	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		410	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		410	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		410	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		410	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		410	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND	S	2000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		790	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		790	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		410	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		790	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		790	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**960**		**81**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		81	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		410	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		410	ug/kg	1

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L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 012-MVBS**
Date Sampled: **03/23/2021 1220**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-009**
Matrix: **Solid**
% Solids: **78.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1600	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND	S	2000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		410	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**430**	**S**	**81**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		410	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**420**		**81**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		410	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		790	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**370**		**81**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		790	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND	S	790	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		790	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		410	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		790	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		410	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		410	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**500**		**81**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		410	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**980**		**81**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		410	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		790	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		410	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		410	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		84	24-137
2-Fluorophenol		64	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		73	26-148
Terphenyl-d14		85	20-127
2,4,6-Tribromophenol		74	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 012-MVBD**
Date Sampled: **03/23/2021 1221**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-010**
Matrix: **Solid**
% Solids: **83.3** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1624	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		76	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		76	ug/kg	1
Acetophenone	98-86-2	8270E	ND		380	ug/kg	1
Anthracene	120-12-7	8270E	ND		76	ug/kg	1
Atrazine	1912-24-9	8270E	ND		380	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		380	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**240**		**76**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**320**		**76**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**400**		**76**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**230**		**76**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**140**		**76**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		380	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		380	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		380	ug/kg	1
Caprolactam	105-60-2	8270E	ND		380	ug/kg	1
Carbazole	86-74-8	8270E	ND		380	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		380	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		380	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		380	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		380	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		380	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		380	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		380	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		380	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**300**		**76**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		76	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		380	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		380	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		380	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		380	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		380	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		380	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		380	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		740	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		740	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		380	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		740	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		740	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**430**		**76**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		76	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		380	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		380	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 012-MVBD**
Date Sampled: **03/23/2021 1221**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-010**
Matrix: **Solid**
% Solids: **83.3** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1624	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		380	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**190**		**76**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		380	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**250**		**76**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		380	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		740	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**210**		**76**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		740	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		740	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		740	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		380	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		740	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		380	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		380	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**240**		**76**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		380	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**410**		**76**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		380	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		740	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		380	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		380	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		62	12-144
Phenol-d5		66	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		73	27-128

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 004-MVBS**
Date Sampled: **03/23/2021 1110**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-011**
Matrix: **Solid**
% Solids: **85.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1649	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		780	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**150**		**150**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		780	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		780	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**520**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**620**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**900**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**400**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**230**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		780	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		780	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		780	ug/kg	1
Caprolactam	105-60-2	8270E	ND		780	ug/kg	1
Carbazole	86-74-8	8270E	ND		780	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		780	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		780	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		780	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		780	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		780	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		780	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		780	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		780	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**490**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		780	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		780	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		780	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		780	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		780	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		780	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		780	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		780	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1100**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		780	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		780	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 004-MVBS**
Date Sampled: **03/23/2021 1110**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-011**
Matrix: **Solid**
% Solids: **85.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1649	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		780	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**340**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		780	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**520**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		780	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**400**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		780	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		780	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		780	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**760**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		780	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**950**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		780	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		780	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		780	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		80	24-137
2-Fluorophenol		64	16-136
Nitrobenzene-d5		65	12-144
Phenol-d5		61	26-148
Terphenyl-d14		77	20-127
2,4,6-Tribromophenol		71	27-128

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 004-MVBD**
Date Sampled: **03/23/2021 1125**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-012**
Matrix: **Solid**
% Solids: **77.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1713	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		82	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		82	ug/kg	1
Acetophenone	98-86-2	8270E	ND		410	ug/kg	1
Anthracene	120-12-7	8270E	ND		82	ug/kg	1
Atrazine	1912-24-9	8270E	ND		410	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		410	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**140**		**82**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**120**		**82**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**150**		**82**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**94**		**82**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		82	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		410	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		410	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		410	ug/kg	1
Caprolactam	105-60-2	8270E	ND		410	ug/kg	1
Carbazole	86-74-8	8270E	ND		410	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		410	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		410	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		410	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		410	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		410	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		410	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		410	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		410	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**120**		**82**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		82	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		410	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		410	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		410	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		410	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		410	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		410	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		410	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		800	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		800	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		410	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		800	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		800	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**190**		**82**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		82	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		410	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		410	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 004-MVBD**
Date Sampled: **03/23/2021 1125**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-012**
Matrix: **Solid**
% Solids: **77.9** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1713	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		410	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		82	ug/kg	1
Isophorone	78-59-1	8270E	ND		410	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**150**		**82**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		410	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		800	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**110**		**82**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		800	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		800	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		800	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		410	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		800	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		410	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		410	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**130**		**82**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		410	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**190**		**82**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		410	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		800	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		410	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		410	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		61	12-144
Phenol-d5		58	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		71	27-128

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 005-MVBS**
Date Sampled: **03/23/2021 1200**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-013**
Matrix: **Solid**
% Solids: **80.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1737	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		160	ug/kg	1
Acetophenone	98-86-2	8270E	ND		800	ug/kg	1
Anthracene	120-12-7	8270E	ND		160	ug/kg	1
Atrazine	1912-24-9	8270E	ND		800	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		800	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**680**		**160**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**830**		**160**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**1000**		**160**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**520**		**160**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**400**		**160**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		800	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		800	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		800	ug/kg	1
Caprolactam	105-60-2	8270E	ND		800	ug/kg	1
Carbazole	86-74-8	8270E	ND		800	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		800	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		800	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		800	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		800	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		800	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		800	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		800	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		800	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**730**		**160**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		800	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		800	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		800	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		800	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		800	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		800	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		800	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1600	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1600	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		800	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1600	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1600	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1300**		**160**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		160	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		800	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		800	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 005-MVBS**
Date Sampled: **03/23/2021 1200**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-013**
Matrix: **Solid**
% Solids: **80.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1737	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		800	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**490**		**160**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		800	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**390**		**160**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		800	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1600	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**350**		**160**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1600	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1600	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1600	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		800	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1600	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		800	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		800	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**650**		**160**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		800	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**1200**		**160**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		800	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1600	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		800	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		800	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		75	24-137
2-Fluorophenol		55	16-136
Nitrobenzene-d5		67	12-144
Phenol-d5		62	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		80	27-128

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 005-MVBD**
Date Sampled: **03/23/2021 1205**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-014**
Matrix: **Solid**
% Solids: **80.5** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1802	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		78	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		78	ug/kg	1
Acetophenone	98-86-2	8270E	ND		400	ug/kg	1
Anthracene	120-12-7	8270E	ND		78	ug/kg	1
Atrazine	1912-24-9	8270E	ND		400	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		400	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**83**		**78**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**110**		**78**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**170**		**78**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**98**		**78**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		78	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		400	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		400	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		400	ug/kg	1
Caprolactam	105-60-2	8270E	ND		400	ug/kg	1
Carbazole	86-74-8	8270E	ND		400	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		400	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		400	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		400	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		400	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		400	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		400	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		400	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		400	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**120**		**78**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		78	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		400	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		400	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		400	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		400	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		400	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		400	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		400	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		770	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		770	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		400	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		770	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		770	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**110**		**78**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		78	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		400	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		400	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 005-MVBD**
Date Sampled: **03/23/2021 1205**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-014**
Matrix: **Solid**
% Solids: **80.5** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1802	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		400	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**90**		**78**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		400	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**420**		**78**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		400	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		770	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**290**		**78**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		770	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		770	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		770	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		400	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		770	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		400	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		400	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**160**		**78**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		400	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**120**		**78**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		400	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		770	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		400	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		400	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		74	24-137
2-Fluorophenol		60	16-136
Nitrobenzene-d5		62	12-144
Phenol-d5		60	26-148
Terphenyl-d14		77	20-127
2,4,6-Tribromophenol		78	27-128

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P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 006-MVBS**
Date Sampled: **03/23/2021 1050**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-015**
Matrix: **Solid**
% Solids: **83.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1826	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		770	ug/kg	1
Anthracene	120-12-7	8270E	ND		150	ug/kg	1
Atrazine	1912-24-9	8270E	ND		770	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		770	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**280**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**280**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**460**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**150**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		150	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		770	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		770	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		770	ug/kg	1
Caprolactam	105-60-2	8270E	ND		770	ug/kg	1
Carbazole	86-74-8	8270E	ND		770	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		770	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		770	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		770	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		770	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		770	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		770	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		770	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		770	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**220**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		770	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		770	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		770	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		770	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		770	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		770	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		770	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		770	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**400**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		770	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		770	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 006-MVBS**
Date Sampled: **03/23/2021 1050**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-015**
Matrix: **Solid**
% Solids: **83.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 1826	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		770	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**150**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		770	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**280**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		770	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**210**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		770	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		770	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		770	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**230**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		770	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**380**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		770	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		770	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		770	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		88	24-137
2-Fluorophenol		73	16-136
Nitrobenzene-d5		76	12-144
Phenol-d5		72	26-148
Terphenyl-d14		85	20-127
2,4,6-Tribromophenol		75	27-128

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 006-MVBD**
Date Sampled: **03/23/2021 1055**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-016**
Matrix: **Solid**
% Solids: **85.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1851	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		77	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		77	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		77	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**100**		**77**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**110**		**77**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**160**		**77**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		77	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		77	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND		390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**110**		**77**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		77	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		750	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		750	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		750	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		750	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**170**		**77**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		77	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 006-MVBD**
Date Sampled: **03/23/2021 1055**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-016**
Matrix: **Solid**
% Solids: **85.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1851	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		77	ug/kg	1
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**110**		**77**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		750	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**97**		**77**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		750	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		750	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		750	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		750	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**110**		**77**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**150**		**77**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		750	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		83	24-137
2-Fluorophenol		70	16-136
Nitrobenzene-d5		69	12-144
Phenol-d5		81	26-148
Terphenyl-d14		83	20-127
2,4,6-Tribromophenol		89	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 009-MVBS**
Date Sampled: **03/23/2021 1215**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-017**
Matrix: **Solid**
% Solids: **77.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1915	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		83	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		83	ug/kg	1
Acetophenone	98-86-2	8270E	ND		420	ug/kg	1
Anthracene	120-12-7	8270E	ND		83	ug/kg	1
Atrazine	1912-24-9	8270E	ND		420	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		420	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**170**		**83**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**210**		**83**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**230**		**83**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**100**		**83**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**110**		**83**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		420	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		420	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		420	ug/kg	1
Caprolactam	105-60-2	8270E	ND		420	ug/kg	1
Carbazole	86-74-8	8270E	ND		420	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		420	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		420	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		420	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		420	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		420	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		420	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		420	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		420	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**160**		**83**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		83	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		420	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		420	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		420	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		420	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		420	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		420	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		420	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2100	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2100	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		810	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		810	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		420	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		810	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		810	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**300**		**83**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		83	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		420	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		420	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 009-MVBS**
Date Sampled: **03/23/2021 1215**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-017**
Matrix: **Solid**
% Solids: **77.7** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1915	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2100	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		420	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**87**		**83**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		420	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**110**		**83**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		420	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		810	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**91**		**83**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		810	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		810	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		810	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		420	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		810	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2100	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		420	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		420	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2100	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**160**		**83**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		420	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**240**		**83**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		420	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		810	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		420	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		420	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		80	24-137
2-Fluorophenol		63	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		64	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		79	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 009-MVBD**
Date Sampled: **03/23/2021 1220**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-018**
Matrix: **Solid**
% Solids: **81.6** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1939	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		77	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		77	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		77	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		77	ug/kg	1
Benzo(a)pyrene	50-32-8	8270E	ND		77	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		77	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		77	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		77	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND		390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	218-01-9	8270E	ND		77	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		77	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		750	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		750	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		750	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		750	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**79**		**77**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		77	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 009-MVBD**
Date Sampled: **03/23/2021 1220**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-018**
Matrix: **Solid**
% Solids: **81.6** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 1939	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		77	ug/kg	1
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		77	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		750	ug/kg	1
Naphthalene	91-20-3	8270E	ND		77	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		750	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		750	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		750	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		750	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		77	ug/kg	1
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	129-00-0	8270E	ND		77	ug/kg	1
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		750	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		80	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		65	12-144
Phenol-d5		74	26-148
Terphenyl-d14		79	20-127
2,4,6-Tribromophenol		78	27-128

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 010-MVBS**
Date Sampled: **03/23/2021 1138**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-019**
Matrix: **Solid**
% Solids: **80.6** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2004	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**1100**		**160**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		820	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**840**		**160**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		820	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		820	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**3900**		**160**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**5300**		**160**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**7800**		**160**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**1900**		**160**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**3000**		**160**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		820	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		820	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		820	ug/kg	1
Caprolactam	105-60-2	8270E	ND		820	ug/kg	1
Carbazole	**86-74-8**	**8270E**	**890**		**820**	**ug/kg**	**1**
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		820	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		820	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		820	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		820	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		820	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		820	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		820	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		820	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**5200**		**160**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	**132-64-9**	**8270E**	**900**		**820**	**ug/kg**	**1**
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		820	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		820	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		820	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		820	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		820	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		820	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1600	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1600	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		820	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1600	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1600	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**9400**		**160**	**ug/kg**	**1**
Fluorene	**86-73-7**	**8270E**	**380**		**160**	**ug/kg**	**1**
Hexachlorobenzene	118-74-1	8270E	ND		820	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		820	ug/kg	1

LOQ = Limit of Quantitation
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 010-MVBS**
Date Sampled: **03/23/2021 1138**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-019**
Matrix: **Solid**
% Solids: **80.6** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2004	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		820	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**2000**		**160**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		820	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**1000**		**160**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		820	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1600	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**1600**		**160**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1600	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1600	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1600	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		820	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1600	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		820	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		820	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**9100**		**160**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		820	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**8400**		**160**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		820	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1600	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		820	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		820	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		83	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		74	12-144
Phenol-d5		84	26-148
Terphenyl-d14		88	20-127
2,4,6-Tribromophenol		79	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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E = Quantitation of compound exceeded the calibration range
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S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 010-MVBD**
Date Sampled: **03/23/2021 1145**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-020**
Matrix: **Solid**
% Solids: **81.3** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2028	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**160**		**160**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		810	ug/kg	1
Anthracene	120-12-7	8270E	ND		160	ug/kg	1
Atrazine	1912-24-9	8270E	ND		810	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		810	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**630**		**160**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**780**		**160**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**940**		**160**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**340**		**160**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**470**		**160**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		810	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		810	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		810	ug/kg	1
Caprolactam	105-60-2	8270E	ND		810	ug/kg	1
Carbazole	86-74-8	8270E	ND		810	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		810	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		810	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		810	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		810	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		810	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		810	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		810	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		810	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**690**		**160**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		810	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		810	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		810	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		810	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		810	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		810	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		810	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1600	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1600	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		810	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1600	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1600	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1000**		**160**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		160	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		810	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		810	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 010-MVBD**
Date Sampled: **03/23/2021 1145**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-020**
Matrix: **Solid**
% Solids: **81.3** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2028	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		810	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**340**		**160**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		810	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**470**		**160**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		810	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1600	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**400**		**160**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1600	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1600	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1600	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		810	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1600	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		810	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		810	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**640**		**160**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		810	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**930**		**160**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		810	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1600	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		810	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		810	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		81	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		74	26-148
Terphenyl-d14		84	20-127
2,4,6-Tribromophenol		70	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 003-MVBS**
Date Sampled: **03/23/2021 1251**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-021**
Matrix: **Solid**
% Solids: **83.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2053	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		760	ug/kg	1
Anthracene	120-12-7	8270E	ND		150	ug/kg	1
Atrazine	1912-24-9	8270E	ND		760	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		760	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**170**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**200**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**280**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		150	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		150	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		760	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		760	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		760	ug/kg	1
Caprolactam	105-60-2	8270E	ND		760	ug/kg	1
Carbazole	86-74-8	8270E	ND		760	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		760	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		760	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		760	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		760	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		760	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		760	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		760	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		760	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**160**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		760	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		760	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		760	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		760	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		760	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		760	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		760	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		760	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**250**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		760	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		760	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 003-MVBS**
Date Sampled: **03/23/2021 1251**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-021**
Matrix: **Solid**
% Solids: **83.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2053	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		760	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		150	ug/kg	1
Isophorone	78-59-1	8270E	ND		760	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		150	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		760	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	91-20-3	8270E	ND		150	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		760	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		760	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		760	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**170**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		760	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**220**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		760	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		760	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		760	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		95	24-137
2-Fluorophenol		80	16-136
Nitrobenzene-d5		81	12-144
Phenol-d5		83	26-148
Terphenyl-d14		92	20-127
2,4,6-Tribromophenol		84	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 003-MVBD**
Date Sampled: **03/23/2021 1254**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-022**
Matrix: **Solid**
% Solids: **83.4** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2117	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		160	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		160	ug/kg	1
Acetophenone	98-86-2	8270E	ND		790	ug/kg	1
Anthracene	120-12-7	8270E	ND		160	ug/kg	1
Atrazine	1912-24-9	8270E	ND		790	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		790	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		160	ug/kg	1
Benzo(a)pyrene	50-32-8	8270E	ND		160	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		160	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		160	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		160	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		790	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		790	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		790	ug/kg	1
Caprolactam	105-60-2	8270E	ND		790	ug/kg	1
Carbazole	86-74-8	8270E	ND		790	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		790	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		790	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		790	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		790	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		790	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		790	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		790	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		790	ug/kg	1
Chrysene	218-01-9	8270E	ND		160	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		160	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		790	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		790	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		790	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		790	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		790	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		790	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		790	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		790	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	206-44-0	8270E	ND		160	ug/kg	1
Fluorene	86-73-7	8270E	ND		160	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		790	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		790	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 003-MVBD**
Date Sampled: **03/23/2021 1254**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-022**
Matrix: **Solid**
% Solids: **83.4** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2117	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		790	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		160	ug/kg	1
Isophorone	78-59-1	8270E	ND		790	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		160	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		790	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	91-20-3	8270E	ND		160	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		790	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		790	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		790	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3900	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		160	ug/kg	1
Phenol	108-95-2	8270E	ND		790	ug/kg	1
Pyrene	129-00-0	8270E	ND		160	ug/kg	1
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		790	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		790	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		790	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		82	24-137
2-Fluorophenol		69	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		74	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		75	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 008-DOTS**
Date Sampled: **03/23/2021 1238**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-023**
Matrix: **Solid**
% Solids: **85.8** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2141	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**200**		**150**	**ug/kg**	**1**
Acetophenone	**98-86-2**	**8270E**	**830**		**770**	**ug/kg**	**1**
Anthracene	**120-12-7**	**8270E**	**220**		**150**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		770	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		770	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**610**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**670**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**1200**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**310**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**280**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		770	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		770	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		770	ug/kg	1
Caprolactam	105-60-2	8270E	ND		770	ug/kg	1
Carbazole	86-74-8	8270E	ND		770	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		770	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		770	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		770	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		770	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		770	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		770	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		770	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		770	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**870**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	**132-64-9**	**8270E**	**1200**		**770**	**ug/kg**	**1**
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		770	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		770	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		770	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		770	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		770	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		770	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		770	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**1100**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		770	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		770	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 008-DOTS**
Date Sampled: **03/23/2021 1238**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-023**
Matrix: **Solid**
% Solids: **85.8** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2141	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		770	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**270**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		770	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**5400**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		770	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**3900**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		770	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		770	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		770	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**2800**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		770	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**1100**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		770	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		770	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		770	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	24-137
2-Fluorophenol		70	16-136
Nitrobenzene-d5		85	12-144
Phenol-d5		85	26-148
Terphenyl-d14		93	20-127
2,4,6-Tribromophenol		89	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 008-DOTD**
Date Sampled: **03/23/2021 1241**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-024**
Matrix: **Solid**
% Solids: **86.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2206	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		740	ug/kg	1
Anthracene	120-12-7	8270E	ND		150	ug/kg	1
Atrazine	1912-24-9	8270E	ND		740	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		740	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**310**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**370**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**500**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**150**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**240**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		740	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		740	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		740	ug/kg	1
Caprolactam	105-60-2	8270E	ND		740	ug/kg	1
Carbazole	86-74-8	8270E	ND		740	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		740	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		740	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		740	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		740	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		740	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		740	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		740	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		740	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**310**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		740	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		740	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		740	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		740	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		740	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		740	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		740	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3700	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3700	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1400	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1400	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		740	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1400	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1400	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**440**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		740	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		740	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
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S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 008-DOTD**
Date Sampled: **03/23/2021 1241**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-024**
Matrix: **Solid**
% Solids: **86.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2206	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3700	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		740	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		150	ug/kg	1
Isophorone	78-59-1	8270E	ND		740	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**2300**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		740	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1400	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**1700**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1400	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1400	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1400	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		740	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1400	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3700	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		740	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		740	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3700	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**1000**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		740	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**450**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		740	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1400	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		740	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		740	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		92	24-137
2-Fluorophenol		78	16-136
Nitrobenzene-d5		82	12-144
Phenol-d5		90	26-148
Terphenyl-d14		92	20-127
2,4,6-Tribromophenol		77	27-128

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
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L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 013-COGS**
Date Sampled: **03/23/2021 1235**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-025**
Matrix: **Solid**
% Solids: **83.8** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2230	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	**83-32-9**	**8270E**	**150**		**150**	**ug/kg**	**1**
Acenaphthylene	**208-96-8**	**8270E**	**340**		**150**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		770	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**510**		**150**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		770	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		770	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**1400**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**1900**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**2300**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**620**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**900**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		770	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		770	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		770	ug/kg	1
Caprolactam	105-60-2	8270E	ND		770	ug/kg	1
Carbazole	86-74-8	8270E	ND		770	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		770	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		770	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		770	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		770	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		770	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		770	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		770	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		770	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**1500**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		770	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		770	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		770	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		770	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		770	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		770	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		770	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		770	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**3400**		**150**	**ug/kg**	**1**
Fluorene	**86-73-7**	**8270E**	**190**		**150**	**ug/kg**	**1**
Hexachlorobenzene	118-74-1	8270E	ND		770	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		770	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 013-COGS**
Date Sampled: **03/23/2021 1235**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-025**
Matrix: **Solid**
% Solids: **83.8** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2230	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		770	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**690**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		770	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**430**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		770	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**430**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		770	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		770	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		770	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**2400**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		770	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**2700**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		770	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		770	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		770	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		83	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		75	12-144
Phenol-d5		83	26-148
Terphenyl-d14		89	20-127
2,4,6-Tribromophenol		60	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 013-COGD**
Date Sampled: **03/23/2021 1240**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-026**
Matrix: **Solid**
% Solids: **85.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2255	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**180**		**150**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		750	ug/kg	1
Anthracene	**120-12-7**	**8270E**	**350**		**150**	**ug/kg**	**1**
Atrazine	1912-24-9	8270E	ND		750	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		750	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**1200**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**1600**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**2200**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**560**		**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**720**		**150**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		750	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		750	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		750	ug/kg	1
Caprolactam	105-60-2	8270E	ND		750	ug/kg	1
Carbazole	86-74-8	8270E	ND		750	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		750	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		750	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		750	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		750	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		750	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		750	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		750	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		750	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**1400**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		750	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		750	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		750	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		750	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		750	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		750	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		750	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3700	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3700	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		750	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**2900**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		750	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		750	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 013-COGD**
Date Sampled: **03/23/2021 1240**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-026**
Matrix: **Solid**
% Solids: **85.1** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	04/04/2021 2255	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3700	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		750	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**580**		**150**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		750	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**430**		**150**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		750	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**400**		**150**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		750	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3700	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		750	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		750	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3700	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**1800**		**150**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		750	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**2300**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		750	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		750	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		750	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		82	24-137
2-Fluorophenol		71	16-136
Nitrobenzene-d5		75	12-144
Phenol-d5		74	26-148
Terphenyl-d14		84	20-127
2,4,6-Tribromophenol		78	27-128

LOQ = Limit of Quantitation
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 014-COGS**
Date Sampled: **03/23/2021 1255**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-027**
Matrix: **Solid**
% Solids: **81.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 2319	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		80	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		80	ug/kg	1
Acetophenone	98-86-2	8270E	ND		400	ug/kg	1
Anthracene	120-12-7	8270E	ND		80	ug/kg	1
Atrazine	1912-24-9	8270E	ND		400	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		400	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**100**		**80**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**85**		**80**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**160**		**80**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		80	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		80	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		400	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		400	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		400	ug/kg	1
Caprolactam	105-60-2	8270E	ND		400	ug/kg	1
Carbazole	86-74-8	8270E	ND		400	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		400	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		400	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		400	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		400	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		400	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		400	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		400	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		400	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**110**		**80**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		80	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		400	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		400	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		400	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		400	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		400	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		400	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		400	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		780	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		780	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		400	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		780	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		780	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**130**		**80**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		80	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		400	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		400	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 014-COGS**
Date Sampled: **03/23/2021 1255**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-027**
Matrix: **Solid**
% Solids: **81.0** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 2319	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		400	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		80	ug/kg	1
Isophorone	78-59-1	8270E	ND		400	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		80	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		400	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		780	ug/kg	1
Naphthalene	91-20-3	8270E	ND		80	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		780	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		780	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		780	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		400	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		780	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		400	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		400	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2000	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		80	ug/kg	1
Phenol	108-95-2	8270E	ND		400	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**130**		**80**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		400	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		780	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		400	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		400	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		75	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		71	26-148
Terphenyl-d14		70	20-127
2,4,6-Tribromophenol		70	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 014-COGD**
Date Sampled: **03/23/2021 1300**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-028**
Matrix: **Solid**
% Solids: **80.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 2343	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		82	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		82	ug/kg	1
Acetophenone	98-86-2	8270E	ND		410	ug/kg	1
Anthracene	120-12-7	8270E	ND		82	ug/kg	1
Atrazine	1912-24-9	8270E	ND		410	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		410	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		82	ug/kg	1
Benzo(a)pyrene	50-32-8	8270E	ND		82	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		82	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		82	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		82	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		410	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		410	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		410	ug/kg	1
Caprolactam	105-60-2	8270E	ND		410	ug/kg	1
Carbazole	86-74-8	8270E	ND		410	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		410	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		410	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		410	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		410	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		410	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		410	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		410	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		410	ug/kg	1
Chrysene	218-01-9	8270E	ND		82	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		82	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		410	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		410	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		410	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		410	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		410	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		410	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		410	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		800	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		800	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		410	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		800	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		800	ug/kg	1
Fluoranthene	206-44-0	8270E	ND		82	ug/kg	1
Fluorene	86-73-7	8270E	ND		82	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		410	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		410	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS 014-COGD**
Date Sampled: **03/23/2021 1300**
Date Received: **03/23/2021**

Laboratory ID: **WC23067-028**
Matrix: **Solid**
% Solids: **80.2** **03/24/2021 0111**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	04/04/2021 2343	STM	04/01/2021 1233	87555

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		410	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		82	ug/kg	1
Isophorone	78-59-1	8270E	ND		410	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		82	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		410	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		800	ug/kg	1
Naphthalene	91-20-3	8270E	ND		82	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		800	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		800	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		800	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		410	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		800	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		410	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		410	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2000	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		82	ug/kg	1
Phenol	108-95-2	8270E	ND		410	ug/kg	1
Pyrene	129-00-0	8270E	ND		82	ug/kg	1
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		410	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		800	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		410	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		410	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		62	12-144
Phenol-d5		58	26-148
Terphenyl-d14		70	20-127
2,4,6-Tribromophenol		72	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

QC Summary

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ86800-001
Batch: 86800
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	04/02/2021 1055
Acenaphthylene	ND		1	13	ug/kg	04/02/2021 1055
Acetophenone	ND		1	67	ug/kg	04/02/2021 1055
Anthracene	ND		1	13	ug/kg	04/02/2021 1055
Atrazine	ND		1	67	ug/kg	04/02/2021 1055
Benzaldehyde	ND		1	67	ug/kg	04/02/2021 1055
Benzo(a)anthracene	ND		1	13	ug/kg	04/02/2021 1055
Benzo(a)pyrene	ND		1	13	ug/kg	04/02/2021 1055
Benzo(b)fluoranthene	ND		1	13	ug/kg	04/02/2021 1055
Benzo(g,h,i)perylene	ND		1	13	ug/kg	04/02/2021 1055
Benzo(k)fluoranthene	ND		1	13	ug/kg	04/02/2021 1055
1,1'-Biphenyl	ND		1	67	ug/kg	04/02/2021 1055
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	04/02/2021 1055
Butyl benzyl phthalate	ND		1	67	ug/kg	04/02/2021 1055
Caprolactam	ND		1	67	ug/kg	04/02/2021 1055
Carbazole	ND		1	67	ug/kg	04/02/2021 1055
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	04/02/2021 1055
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	04/02/2021 1055
4-Chloroaniline	ND		1	67	ug/kg	04/02/2021 1055
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	04/02/2021 1055
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	04/02/2021 1055
2-Chloronaphthalene	ND		1	67	ug/kg	04/02/2021 1055
2-Chlorophenol	ND		1	67	ug/kg	04/02/2021 1055
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	04/02/2021 1055
Chrysene	ND		1	13	ug/kg	04/02/2021 1055
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	04/02/2021 1055
Dibenzofuran	ND		1	67	ug/kg	04/02/2021 1055
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	04/02/2021 1055
2,4-Dichlorophenol	ND		1	67	ug/kg	04/02/2021 1055
Diethylphthalate	ND		1	67	ug/kg	04/02/2021 1055
Dimethyl phthalate	ND		1	67	ug/kg	04/02/2021 1055
2,4-Dimethylphenol	ND		1	67	ug/kg	04/02/2021 1055
Di-n-butyl phthalate	ND		1	67	ug/kg	04/02/2021 1055
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	04/02/2021 1055
2,4-Dinitrophenol	ND		1	330	ug/kg	04/02/2021 1055
2,4-Dinitrotoluene	ND		1	130	ug/kg	04/02/2021 1055
2,6-Dinitrotoluene	ND		1	130	ug/kg	04/02/2021 1055
Di-n-octylphthalate	ND		1	67	ug/kg	04/02/2021 1055
1,4-Dioxane	ND		1	130	ug/kg	04/02/2021 1055
bis(2-Ethylhexyl)phthalate	ND		1	130	ug/kg	04/02/2021 1055
Fluoranthene	ND		1	13	ug/kg	04/02/2021 1055
Fluorene	ND		1	13	ug/kg	04/02/2021 1055
Hexachlorobenzene	ND		1	67	ug/kg	04/02/2021 1055
Hexachlorobutadiene	ND		1	67	ug/kg	04/02/2021 1055

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ86800-001
Batch: 86800
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachlorocyclopentadiene	ND		1	330	ug/kg	04/02/2021 1055
Hexachloroethane	ND		1	67	ug/kg	04/02/2021 1055
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	04/02/2021 1055
Isophorone	ND		1	67	ug/kg	04/02/2021 1055
2-Methylnaphthalene	ND		1	13	ug/kg	04/02/2021 1055
2-Methylphenol	ND		1	67	ug/kg	04/02/2021 1055
3+4-Methylphenol	ND		1	130	ug/kg	04/02/2021 1055
Naphthalene	ND		1	13	ug/kg	04/02/2021 1055
2-Nitroaniline	ND		1	130	ug/kg	04/02/2021 1055
3-Nitroaniline	ND		1	130	ug/kg	04/02/2021 1055
4-Nitroaniline	ND		1	130	ug/kg	04/02/2021 1055
Nitrobenzene	ND		1	67	ug/kg	04/02/2021 1055
2-Nitrophenol	ND		1	130	ug/kg	04/02/2021 1055
4-Nitrophenol	ND		1	330	ug/kg	04/02/2021 1055
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	04/02/2021 1055
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	04/02/2021 1055
Pentachlorophenol	ND		1	330	ug/kg	04/02/2021 1055
Phenanthrene	ND		1	13	ug/kg	04/02/2021 1055
Phenol	ND		1	67	ug/kg	04/02/2021 1055
Pyrene	ND		1	13	ug/kg	04/02/2021 1055
1,2,4,5-Tetrachlorobenzene	ND		1	67	ug/kg	04/02/2021 1055
2,3,4,6-Tetrachlorophenol	ND		1	130	ug/kg	04/02/2021 1055
2,4,5-Trichlorophenol	ND		1	67	ug/kg	04/02/2021 1055
2,4,6-Trichlorophenol	ND		1	67	ug/kg	04/02/2021 1055

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		78	16-136
Nitrobenzene-d5		71	12-144
Phenol-d5		86	26-148
Terphenyl-d14		83	20-127
2,4,6-Tribromophenol		74	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ86800-002 **Matrix:** Solid
Batch: 86800 **Prep Method:** 3546
Analytical Method: 8270E **Prep Date:** 03/25/2021 1035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	670	560		1	84	12-111	04/02/2021 1119
Acenaphthylene	670	560		1	84	44-122	04/02/2021 1119
Acetophenone	670	620		1	94	48-111	04/02/2021 1119
Anthracene	670	610		1	91	16-122	04/02/2021 1119
Atrazine	670	520		1	78	48-116	04/02/2021 1119
Benzaldehyde	670	180		1	27	10-110	04/02/2021 1119
Benzo(a)anthracene	670	570		1	86	40-121	04/02/2021 1119
Benzo(a)pyrene	670	690		1	104	36-114	04/02/2021 1119
Benzo(b)fluoranthene	670	670		1	100	38-123	04/02/2021 1119
Benzo(g,h,i)perylene	670	620		1	93	43-120	04/02/2021 1119
Benzo(k)fluoranthene	670	600		1	90	40-126	04/02/2021 1119
1,1'-Biphenyl	670	580		1	88	49-110	04/02/2021 1119
4-Bromophenyl phenyl ether	670	600		1	90	46-118	04/02/2021 1119
Butyl benzyl phthalate	670	570		1	86	46-128	04/02/2021 1119
Caprolactam	670	550		1	83	43-121	04/02/2021 1119
Carbazole	670	620		1	94	47-128	04/02/2021 1119
bis (2-Chloro-1-methylethyl) ether	670	610		1	92	31-102	04/02/2021 1119
4-Chloro-3-methyl phenol	670	570		1	86	49-118	04/02/2021 1119
4-Chloroaniline	670	480		1	72	17-106	04/02/2021 1119
bis(2-Chloroethoxy)methane	670	560		1	84	39-108	04/02/2021 1119
bis(2-Chloroethyl)ether	670	630		1	94	32-105	04/02/2021 1119
2-Chloronaphthalene	670	570		1	86	31-127	04/02/2021 1119
2-Chlorophenol	670	540		1	81	37-106	04/02/2021 1119
4-Chlorophenyl phenyl ether	670	560		1	84	47-116	04/02/2021 1119
Chrysene	670	580		1	87	41-124	04/02/2021 1119
Dibenzo(a,h)anthracene	670	630		1	94	38-125	04/02/2021 1119
Dibenzofuran	670	560		1	84	45-112	04/02/2021 1119
3,3'-Dichlorobenzidine	670	580		1	86	10-119	04/02/2021 1119
2,4-Dichlorophenol	670	530		1	79	41-113	04/02/2021 1119
Diethylphthalate	670	600		1	91	49-123	04/02/2021 1119
Dimethyl phthalate	670	580		1	88	48-120	04/02/2021 1119
2,4-Dimethylphenol	670	610		1	91	33-123	04/02/2021 1119
Di-n-butyl phthalate	670	620		1	94	51-129	04/02/2021 1119
4,6-Dinitro-2-methylphenol	670	470		1	70	40-130	04/02/2021 1119
2,4-Dinitrophenol	1300	760		1	57	10-113	04/02/2021 1119
2,4-Dinitrotoluene	670	650		1	98	48-124	04/02/2021 1119
2,6-Dinitrotoluene	670	640		1	96	47-125	04/02/2021 1119
Di-n-octylphthalate	670	650		1	98	49-142	04/02/2021 1119
bis(2-Ethylhexyl)phthalate	670	640		1	97	45-128	04/02/2021 1119
Fluoranthene	670	580		1	88	26-133	04/02/2021 1119
Fluorene	670	540		1	82	19-108	04/02/2021 1119
Hexachlorobenzene	670	570		1	85	44-122	04/02/2021 1119
Hexachlorobutadiene	670	500		1	75	33-103	04/02/2021 1119
Hexachlorocyclopentadiene	3300	2600		1	77	18-121	04/02/2021 1119

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ86800-002
Batch: 86800
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	670	530		1	80	30-96	04/02/2021 1119
Indeno(1,2,3-c,d)pyrene	670	590		1	89	42-123	04/02/2021 1119
Isophorone	670	630		1	95	41-113	04/02/2021 1119
2-Methylnaphthalene	670	540		1	81	10-107	04/02/2021 1119
2-Methylphenol	670	590		1	88	32-107	04/02/2021 1119
3+4-Methylphenol	670	600		1	90	39-108	04/02/2021 1119
Naphthalene	670	540		1	81	10-112	04/02/2021 1119
2-Nitroaniline	670	570		1	85	45-123	04/02/2021 1119
3-Nitroaniline	670	520		1	78	24-127	04/02/2021 1119
4-Nitroaniline	670	560		1	84	48-127	04/02/2021 1119
Nitrobenzene	670	580		1	87	33-114	04/02/2021 1119
2-Nitrophenol	670	540		1	81	35-108	04/02/2021 1119
4-Nitrophenol	1300	1200		1	89	18-154	04/02/2021 1119
N-Nitrosodi-n-propylamine	670	630		1	94	32-115	04/02/2021 1119
N-Nitrosodiphenylamine (Diphenylamine)	670	630		1	95	53-150	04/02/2021 1119
Pentachlorophenol	1300	1200		1	93	27-138	04/02/2021 1119
Phenanthrene	670	580		1	87	16-123	04/02/2021 1119
Phenol	670	570		1	85	36-108	04/02/2021 1119
Pyrene	670	600		1	90	34-121	04/02/2021 1119
1,2,4,5-Tetrachlorobenzene	670	530		1	79	30-130	04/02/2021 1119
2,3,4,6-Tetrachlorophenol	670	530		1	79	53-125	04/02/2021 1119
2,4,5-Trichlorophenol	670	520		1	78	46-122	04/02/2021 1119
2,4,6-Trichlorophenol	670	520		1	77	38-115	04/02/2021 1119

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		79	16-136
Nitrobenzene-d5		74	12-144
Phenol-d5		85	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		80	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WC23067-001MS
Batch: 86800
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	ND	800	670		5	84	12-111	04/03/2021 2334
Acenaphthylene	ND	800	650		5	81	44-122	04/03/2021 2334
Acetophenone	ND	800	710		5	89	30-130	04/03/2021 2334
Anthracene	ND	800	690		5	86	16-122	04/03/2021 2334
Atrazine	ND	800	630		5	80	30-130	04/03/2021 2334
Benzaldehyde	ND	800	560		5	70	10-110	04/03/2021 2334
Benzo(a)anthracene	120	800	700		5	73	40-121	04/03/2021 2334
Benzo(a)pyrene	120	800	840		5	91	36-114	04/03/2021 2334
Benzo(b)fluoranthene	130	800	890		5	95	38-123	04/03/2021 2334
Benzo(g,h,i)perylene	ND	800	420		5	52	43-120	04/03/2021 2334
Benzo(k)fluoranthene	ND	800	710		5	88	40-126	04/03/2021 2334
1,1'-Biphenyl	ND	800	680		5	86	30-130	04/03/2021 2334
4-Bromophenyl phenyl ether	ND	800	740		5	93	30-130	04/03/2021 2334
Butyl benzyl phthalate	ND	800	740		5	92	30-130	04/03/2021 2334
Caprolactam	ND	800	600		5	76	30-130	04/03/2021 2334
Carbazole	ND	800	740		5	92	30-130	04/03/2021 2334
bis (2-Chloro-1-methylethyl) ether	ND	800	650		5	82	30-130	04/03/2021 2334
4-Chloro-3-methyl phenol	ND	800	580		5	72	30-130	04/03/2021 2334
4-Chloroaniline	ND	800	290		5	37	17-106	04/03/2021 2334
bis(2-Chloroethoxy)methane	ND	800	590		5	74	30-130	04/03/2021 2334
bis(2-Chloroethyl)ether	ND	800	620		5	78	30-130	04/03/2021 2334
2-Chloronaphthalene	ND	800	660		5	82	30-130	04/03/2021 2334
2-Chlorophenol	ND	800	610		5	76	30-130	04/03/2021 2334
4-Chlorophenyl phenyl ether	ND	800	630		5	78	30-130	04/03/2021 2334
Chrysene	88	800	710		5	78	41-124	04/03/2021 2334
Dibenzo(a,h)anthracene	ND	800	520		5	65	38-125	04/03/2021 2334
Dibenzofuran	ND	800	670		5	84	30-130	04/03/2021 2334
3,3'-Dichlorobenzidine	ND	800	ND	N	5	0.00	10-119	04/03/2021 2334
2,4-Dichlorophenol	ND	800	620		5	78	30-130	04/03/2021 2334
Diethylphthalate	ND	800	700		5	87	30-130	04/03/2021 2334
Dimethyl phthalate	ND	800	670		5	84	30-130	04/03/2021 2334
2,4-Dimethylphenol	ND	800	750		5	93	30-130	04/03/2021 2334
Di-n-butyl phthalate	ND	800	730		5	92	30-130	04/03/2021 2334
4,6-Dinitro-2-methylphenol	ND	800	750		5	94	30-130	04/03/2021 2334
2,4-Dinitrophenol	ND	1600	2600	N	5	163	30-130	04/03/2021 2334
2,4-Dinitrotoluene	ND	800	630		5	79	30-130	04/03/2021 2334
2,6-Dinitrotoluene	ND	800	670		5	84	30-130	04/03/2021 2334
Di-n-octylphthalate	ND	800	740		5	93	30-130	04/03/2021 2334
bis(2-Ethylhexyl)phthalate	ND	800	720		5	90	30-130	04/03/2021 2334
Fluoranthene	190	800	780		5	74	26-133	04/03/2021 2334
Fluorene	ND	800	640		5	81	19-108	04/03/2021 2334
Hexachlorobenzene	ND	800	650		5	82	30-130	04/03/2021 2334
Hexachlorobutadiene	ND	800	610		5	77	30-130	04/03/2021 2334
Hexachlorocyclopentadiene	ND	4000	530	N	5	13	30-130	04/03/2021 2334

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WC23067-001MS
Batch: 86800
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	ND	800	460		5	58	30-130	04/03/2021 2334
Indeno(1,2,3-c,d)pyrene	ND	800	490		5	62	42-123	04/03/2021 2334
Isophorone	ND	800	640		5	80	30-130	04/03/2021 2334
2-Methylnaphthalene	94	800	730		5	80	10-107	04/03/2021 2334
2-Methylphenol	ND	800	580		5	72	30-130	04/03/2021 2334
3+4-Methylphenol	ND	800	590		5	73	30-130	04/03/2021 2334
Naphthalene	ND	800	710		5	89	10-112	04/03/2021 2334
2-Nitroaniline	ND	800	560		5	70	30-130	04/03/2021 2334
3-Nitroaniline	ND	800	ND	N	5	0.00	30-130	04/03/2021 2334
4-Nitroaniline	ND	800	ND	N	5	0.00	30-130	04/03/2021 2334
Nitrobenzene	ND	800	760		5	95	30-130	04/03/2021 2334
2-Nitrophenol	ND	800	620		5	78	30-130	04/03/2021 2334
4-Nitrophenol	ND	1600	1200		5	74	30-130	04/03/2021 2334
N-Nitrosodi-n-propylamine	ND	800	680		5	86	30-130	04/03/2021 2334
N-Nitrosodiphenylamine (Diphenylamine)	ND	800	710		5	89	30-130	04/03/2021 2334
Pentachlorophenol	ND	1600	1300		5	80	30-130	04/03/2021 2334
Phenanthrene	140	800	740		5	76	16-123	04/03/2021 2334
Phenol	ND	800	500		5	63	30-130	04/03/2021 2334
Pyrene	170	800	800		5	79	34-121	04/03/2021 2334
1,2,4,5-Tetrachlorobenzene	ND	800	610		5	77	30-130	04/03/2021 2334
2,3,4,6-Tetrachlorophenol	ND	800	710		5	89	53-125	04/03/2021 2334
2,4,5-Trichlorophenol	ND	800	570		5	71	30-130	04/03/2021 2334
2,4,6-Trichlorophenol	ND	800	510		5	64	30-130	04/03/2021 2334

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		73	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		68	26-148
Terphenyl-d14		77	20-127
2,4,6-Tribromophenol		74	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WC23067-001MD
Batch: 86800
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	800	630		5	79	5.2	12-111	30	04/03/2021 2359
Acenaphthylene	ND	800	610		5	77	5.6	44-122	30	04/03/2021 2359
Acetophenone	ND	800	730		5	92	2.6	30-130	40	04/03/2021 2359
Anthracene	ND	800	640		5	80	7.4	16-122	30	04/03/2021 2359
Atrazine	ND	800	590		5	73	8.1	30-130	40	04/03/2021 2359
Benzaldehyde	ND	800	550		5	69	1.9	10-110	40	04/03/2021 2359
Benzo(a)anthracene	120	800	700		5	73	0.15	40-121	30	04/03/2021 2359
Benzo(a)pyrene	120	800	880		5	95	4.1	36-114	30	04/03/2021 2359
Benzo(b)fluoranthene	130	800	860		5	92	3.0	38-123	30	04/03/2021 2359
Benzo(g,h,i)perylene	ND	800	420		5	52	0.37	43-120	30	04/03/2021 2359
Benzo(k)fluoranthene	ND	800	780		5	97	9.6	40-126	30	04/03/2021 2359
1,1'-Biphenyl	ND	800	640		5	80	6.7	30-130	40	04/03/2021 2359
4-Bromophenyl phenyl ether	ND	800	630		5	79	16	30-130	40	04/03/2021 2359
Butyl benzyl phthalate	ND	800	650		5	82	12	30-130	40	04/03/2021 2359
Caprolactam	ND	800	520		5	66	14	30-130	40	04/03/2021 2359
Carbazole	ND	800	690		5	87	6.0	30-130	40	04/03/2021 2359
bis (2-Chloro-1-methylethyl) ether	ND	800	650		5	82	0.37	30-130	40	04/03/2021 2359
4-Chloro-3-methyl phenol	ND	800	590		5	74	2.3	30-130	40	04/03/2021 2359
4-Chloroaniline	ND	800	280		5	35	3.5	17-106	40	04/03/2021 2359
bis(2-Chloroethoxy)methane	ND	800	530		5	66	11	30-130	40	04/03/2021 2359
bis(2-Chloroethyl)ether	ND	800	590		5	73	5.9	30-130	40	04/03/2021 2359
2-Chloronaphthalene	ND	800	610		5	76	7.5	30-130	40	04/03/2021 2359
2-Chlorophenol	ND	800	620		5	77	1.6	30-130	40	04/03/2021 2359
4-Chlorophenyl phenyl ether	ND	800	580		5	73	7.5	30-130	40	04/03/2021 2359
Chrysene	88	800	730		5	80	2.2	41-124	30	04/03/2021 2359
Dibenzo(a,h)anthracene	ND	800	460		5	58	12	38-125	30	04/03/2021 2359
Dibenzofuran	ND	800	650		5	82	3.4	30-130	40	04/03/2021 2359
3,3'-Dichlorobenzidine	ND	800	ND	N	5	0.00	0.00	10-119	40	04/03/2021 2359
2,4-Dichlorophenol	ND	800	550		5	68	13	30-130	40	04/03/2021 2359
Diethylphthalate	ND	800	650		5	82	6.5	30-130	40	04/03/2021 2359
Dimethyl phthalate	ND	800	610		5	76	9.9	30-130	40	04/03/2021 2359
2,4-Dimethylphenol	ND	800	640		5	80	15	30-130	40	04/03/2021 2359
Di-n-butyl phthalate	ND	800	710		5	88	3.6	30-130	40	04/03/2021 2359
4,6-Dinitro-2-methylphenol	ND	800	750		5	93	0.48	30-130	40	04/03/2021 2359
2,4-Dinitrophenol	ND	1600	2600	N	5	163	0.42	30-130	40	04/03/2021 2359
2,4-Dinitrotoluene	ND	800	590		5	74	6.9	30-130	40	04/03/2021 2359
2,6-Dinitrotoluene	ND	800	640		5	81	4.0	30-130	40	04/03/2021 2359
Di-n-octylphthalate	ND	800	730		5	91	1.9	30-130	40	04/03/2021 2359
bis(2-Ethylhexyl)phthalate	ND	800	660		5	83	8.5	30-130	40	04/03/2021 2359
Fluoranthene	190	800	840		5	81	7.0	26-133	30	04/03/2021 2359
Fluorene	ND	800	600		5	75	6.8	19-108	30	04/03/2021 2359
Hexachlorobenzene	ND	800	590		5	74	9.8	30-130	40	04/03/2021 2359
Hexachlorobutadiene	ND	800	570		5	72	6.4	30-130	40	04/03/2021 2359
Hexachlorocyclopentadiene	ND	4000	480	N	5	12	9.8	30-130	40	04/03/2021 2359

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WC23067-001MD
Batch: 86800
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 03/25/2021 1035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	800	440		5	55	5.3	30-130	40	04/03/2021 2359
Indeno(1,2,3-c,d)pyrene	ND	800	470		5	58	5.9	42-123	30	04/03/2021 2359
Isophorone	ND	800	640		5	80	0.037	30-130	40	04/03/2021 2359
2-Methylnaphthalene	94	800	720		5	79	1.7	10-107	30	04/03/2021 2359
2-Methylphenol	ND	800	520		5	65	11	30-130	40	04/03/2021 2359
3+4-Methylphenol	ND	800	580		5	73	0.59	30-130	40	04/03/2021 2359
Naphthalene	ND	800	680		5	85	5.3	10-112	30	04/03/2021 2359
2-Nitroaniline	ND	800	510		5	64	9.9	30-130	40	04/03/2021 2359
3-Nitroaniline	ND	800	200	N,+	5	25	200	30-130	40	04/03/2021 2359
4-Nitroaniline	ND	800	230	N,+	5	29	200	30-130	40	04/03/2021 2359
Nitrobenzene	ND	800	720		5	91	5.1	30-130	40	04/03/2021 2359
2-Nitrophenol	ND	800	540		5	67	14	30-130	40	04/03/2021 2359
4-Nitrophenol	ND	1600	1100		5	68	8.6	30-130	40	04/03/2021 2359
N-Nitrosodi-n-propylamine	ND	800	680		5	86	0.14	30-130	40	04/03/2021 2359
N-Nitrosodiphenylamine (Diphenylamine)	ND	800	620		5	77	14	30-130	40	04/03/2021 2359
Pentachlorophenol	ND	1600	1200		5	76	4.6	30-130	40	04/03/2021 2359
Phenanthrene	140	800	750		5	77	1.3	16-123	30	04/03/2021 2359
Phenol	ND	800	540		5	68	7.6	30-130	40	04/03/2021 2359
Pyrene	170	800	800		5	78	0.79	34-121	30	04/03/2021 2359
1,2,4,5-Tetrachlorobenzene	ND	800	550		5	69	10	30-130	40	04/03/2021 2359
2,3,4,6-Tetrachlorophenol	ND	800	600		5	75	17	53-125	40	04/03/2021 2359
2,4,5-Trichlorophenol	ND	800	550		5	69	2.3	30-130	40	04/03/2021 2359
2,4,6-Trichlorophenol	ND	800	450		5	56	13	30-130	40	04/03/2021 2359

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		68	24-137
2-Fluorophenol		62	16-136
Nitrobenzene-d5		63	12-144
Phenol-d5		64	26-148
Terphenyl-d14		71	20-127
2,4,6-Tribromophenol		67	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
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+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ87552-001
Batch: 87552
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1146

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	04/03/2021 1326
Acenaphthylene	ND		1	13	ug/kg	04/03/2021 1326
Acetophenone	ND		1	67	ug/kg	04/03/2021 1326
Anthracene	ND		1	13	ug/kg	04/03/2021 1326
Atrazine	ND		1	67	ug/kg	04/03/2021 1326
Benzaldehyde	ND		1	67	ug/kg	04/03/2021 1326
Benzo(a)anthracene	ND		1	13	ug/kg	04/03/2021 1326
Benzo(a)pyrene	ND		1	13	ug/kg	04/03/2021 1326
Benzo(b)fluoranthene	ND		1	13	ug/kg	04/03/2021 1326
Benzo(g,h,i)perylene	ND		1	13	ug/kg	04/03/2021 1326
Benzo(k)fluoranthene	ND		1	13	ug/kg	04/03/2021 1326
1,1'-Biphenyl	ND		1	67	ug/kg	04/03/2021 1326
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	04/03/2021 1326
Butyl benzyl phthalate	ND		1	67	ug/kg	04/03/2021 1326
Caprolactam	ND		1	67	ug/kg	04/03/2021 1326
Carbazole	ND		1	67	ug/kg	04/03/2021 1326
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	04/03/2021 1326
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	04/03/2021 1326
4-Chloroaniline	ND		1	67	ug/kg	04/03/2021 1326
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	04/03/2021 1326
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	04/03/2021 1326
2-Chloronaphthalene	ND		1	67	ug/kg	04/03/2021 1326
2-Chlorophenol	ND		1	67	ug/kg	04/03/2021 1326
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	04/03/2021 1326
Chrysene	ND		1	13	ug/kg	04/03/2021 1326
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	04/03/2021 1326
Dibenzofuran	ND		1	67	ug/kg	04/03/2021 1326
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	04/03/2021 1326
2,4-Dichlorophenol	ND		1	67	ug/kg	04/03/2021 1326
Diethylphthalate	ND		1	67	ug/kg	04/03/2021 1326
Dimethyl phthalate	ND		1	67	ug/kg	04/03/2021 1326
2,4-Dimethylphenol	ND		1	67	ug/kg	04/03/2021 1326
Di-n-butyl phthalate	ND		1	67	ug/kg	04/03/2021 1326
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	04/03/2021 1326
2,4-Dinitrophenol	ND		1	330	ug/kg	04/03/2021 1326
2,4-Dinitrotoluene	ND		1	130	ug/kg	04/03/2021 1326
2,6-Dinitrotoluene	ND		1	130	ug/kg	04/03/2021 1326
Di-n-octylphthalate	ND		1	67	ug/kg	04/03/2021 1326
1,4-Dioxane	ND		1	130	ug/kg	04/03/2021 1326
bis(2-Ethylhexyl)phthalate	ND		1	130	ug/kg	04/03/2021 1326
Fluoranthene	ND		1	13	ug/kg	04/03/2021 1326
Fluorene	ND		1	13	ug/kg	04/03/2021 1326
Hexachlorobenzene	ND		1	67	ug/kg	04/03/2021 1326
Hexachlorobutadiene	ND		1	67	ug/kg	04/03/2021 1326

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ87552-001
Batch: 87552
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1146

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachlorocyclopentadiene	ND		1	330	ug/kg	04/03/2021 1326
Hexachloroethane	ND		1	67	ug/kg	04/03/2021 1326
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	04/03/2021 1326
Isophorone	ND		1	67	ug/kg	04/03/2021 1326
2-Methylnaphthalene	ND		1	13	ug/kg	04/03/2021 1326
2-Methylphenol	ND		1	67	ug/kg	04/03/2021 1326
3+4-Methylphenol	ND		1	130	ug/kg	04/03/2021 1326
Naphthalene	ND		1	13	ug/kg	04/03/2021 1326
2-Nitroaniline	ND		1	130	ug/kg	04/03/2021 1326
3-Nitroaniline	ND		1	130	ug/kg	04/03/2021 1326
4-Nitroaniline	ND		1	130	ug/kg	04/03/2021 1326
Nitrobenzene	ND		1	67	ug/kg	04/03/2021 1326
2-Nitrophenol	ND		1	130	ug/kg	04/03/2021 1326
4-Nitrophenol	ND		1	330	ug/kg	04/03/2021 1326
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	04/03/2021 1326
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	04/03/2021 1326
Pentachlorophenol	ND		1	330	ug/kg	04/03/2021 1326
Phenanthrene	ND		1	13	ug/kg	04/03/2021 1326
Phenol	ND		1	67	ug/kg	04/03/2021 1326
Pyrene	ND		1	13	ug/kg	04/03/2021 1326
1,2,4,5-Tetrachlorobenzene	ND		1	67	ug/kg	04/03/2021 1326
2,3,4,6-Tetrachlorophenol	ND		1	130	ug/kg	04/03/2021 1326
2,4,5-Trichlorophenol	ND		1	67	ug/kg	04/03/2021 1326
2,4,6-Trichlorophenol	ND		1	67	ug/kg	04/03/2021 1326

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		79	24-137
2-Fluorophenol		75	16-136
Nitrobenzene-d5		74	12-144
Phenol-d5		79	26-148
Terphenyl-d14		89	20-127
2,4,6-Tribromophenol		68	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ87552-002
Batch: 87552
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1146

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	670	550		1	83	12-111	04/03/2021 1415
Acenaphthylene	670	560		1	83	44-122	04/03/2021 1415
Acetophenone	670	570		1	85	48-111	04/03/2021 1415
Anthracene	670	570		1	86	16-122	04/03/2021 1415
Atrazine	670	500		1	75	48-116	04/03/2021 1415
Benzaldehyde	670	310		1	46	10-110	04/03/2021 1415
Benzo(a)anthracene	670	560		1	85	40-121	04/03/2021 1415
Benzo(a)pyrene	670	690		1	103	36-114	04/03/2021 1415
Benzo(b)fluoranthene	670	620		1	93	38-123	04/03/2021 1415
Benzo(g,h,i)perylene	670	600		1	91	43-120	04/03/2021 1415
Benzo(k)fluoranthene	670	600		1	90	40-126	04/03/2021 1415
1,1'-Biphenyl	670	570		1	86	49-110	04/03/2021 1415
4-Bromophenyl phenyl ether	670	630		1	95	46-118	04/03/2021 1415
Butyl benzyl phthalate	670	520		1	78	46-128	04/03/2021 1415
Caprolactam	670	540		1	82	43-121	04/03/2021 1415
Carbazole	670	590		1	89	47-128	04/03/2021 1415
bis (2-Chloro-1-methylethyl) ether	670	540		1	81	31-102	04/03/2021 1415
4-Chloro-3-methyl phenol	670	540		1	82	49-118	04/03/2021 1415
4-Chloroaniline	670	530		1	79	17-106	04/03/2021 1415
bis(2-Chloroethoxy)methane	670	490		1	74	39-108	04/03/2021 1415
bis(2-Chloroethyl)ether	670	560		1	84	32-105	04/03/2021 1415
2-Chloronaphthalene	670	550		1	83	31-127	04/03/2021 1415
2-Chlorophenol	670	480		1	72	37-106	04/03/2021 1415
4-Chlorophenyl phenyl ether	670	570		1	86	47-116	04/03/2021 1415
Chrysene	670	570		1	85	41-124	04/03/2021 1415
Dibenzo(a,h)anthracene	670	620		1	93	38-125	04/03/2021 1415
Dibenzofuran	670	550		1	83	45-112	04/03/2021 1415
3,3'-Dichlorobenzidine	670	500		1	75	10-119	04/03/2021 1415
2,4-Dichlorophenol	670	490		1	73	41-113	04/03/2021 1415
Diethylphthalate	670	590		1	89	49-123	04/03/2021 1415
Dimethyl phthalate	670	570		1	86	48-120	04/03/2021 1415
2,4-Dimethylphenol	670	530		1	79	33-123	04/03/2021 1415
Di-n-butyl phthalate	670	610		1	92	51-129	04/03/2021 1415
4,6-Dinitro-2-methylphenol	670	630		1	95	40-130	04/03/2021 1415
2,4-Dinitrophenol	1300	1200		1	91	10-113	04/03/2021 1415
2,4-Dinitrotoluene	670	680		1	102	48-124	04/03/2021 1415
2,6-Dinitrotoluene	670	660		1	99	47-125	04/03/2021 1415
Di-n-octylphthalate	670	610		1	91	49-142	04/03/2021 1415
bis(2-Ethylhexyl)phthalate	670	610		1	91	45-128	04/03/2021 1415
Fluoranthene	670	560		1	84	26-133	04/03/2021 1415
Fluorene	670	540		1	81	19-108	04/03/2021 1415
Hexachlorobenzene	670	580		1	88	44-122	04/03/2021 1415
Hexachlorobutadiene	670	530		1	80	33-103	04/03/2021 1415
Hexachlorocyclopentadiene	3300	2600		1	79	18-121	04/03/2021 1415

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ87552-002
Batch: 87552
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1146

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	670	500		1	75	30-96	04/03/2021 1415
Indeno(1,2,3-c,d)pyrene	670	600		1	89	42-123	04/03/2021 1415
Isophorone	670	560		1	84	41-113	04/03/2021 1415
2-Methylnaphthalene	670	540		1	80	10-107	04/03/2021 1415
2-Methylphenol	670	490		1	73	32-107	04/03/2021 1415
3+4-Methylphenol	670	480		1	71	39-108	04/03/2021 1415
Naphthalene	670	520		1	79	10-112	04/03/2021 1415
2-Nitroaniline	670	590		1	89	45-123	04/03/2021 1415
3-Nitroaniline	670	500		1	75	24-127	04/03/2021 1415
4-Nitroaniline	670	570		1	85	48-127	04/03/2021 1415
Nitrobenzene	670	550		1	82	33-114	04/03/2021 1415
2-Nitrophenol	670	570		1	85	35-108	04/03/2021 1415
4-Nitrophenol	1300	1100		1	84	18-154	04/03/2021 1415
N-Nitrosodi-n-propylamine	670	590		1	89	32-115	04/03/2021 1415
N-Nitrosodiphenylamine (Diphenylamine)	670	610		1	91	53-150	04/03/2021 1415
Pentachlorophenol	1300	750		1	56	27-138	04/03/2021 1415
Phenanthrene	670	560		1	84	16-123	04/03/2021 1415
Phenol	670	450		1	68	36-108	04/03/2021 1415
Pyrene	670	580		1	86	34-121	04/03/2021 1415
1,2,4,5-Tetrachlorobenzene	670	530		1	79	30-130	04/03/2021 1415
2,3,4,6-Tetrachlorophenol	670	420		1	63	53-125	04/03/2021 1415
2,4,5-Trichlorophenol	670	450		1	68	46-122	04/03/2021 1415
2,4,6-Trichlorophenol	670	460		1	68	38-115	04/03/2021 1415

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		75	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		73	26-148
Terphenyl-d14		80	20-127
2,4,6-Tribromophenol		83	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ87555-001
Batch: 87555
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	04/04/2021 1511
Acenaphthylene	ND		1	13	ug/kg	04/04/2021 1511
Acetophenone	ND		1	67	ug/kg	04/04/2021 1511
Anthracene	ND		1	13	ug/kg	04/04/2021 1511
Atrazine	ND		1	67	ug/kg	04/04/2021 1511
Benzaldehyde	ND		1	67	ug/kg	04/04/2021 1511
Benzo(a)anthracene	ND		1	13	ug/kg	04/04/2021 1511
Benzo(a)pyrene	ND		1	13	ug/kg	04/04/2021 1511
Benzo(b)fluoranthene	ND		1	13	ug/kg	04/04/2021 1511
Benzo(g,h,i)perylene	ND		1	13	ug/kg	04/04/2021 1511
Benzo(k)fluoranthene	ND		1	13	ug/kg	04/04/2021 1511
1,1'-Biphenyl	ND		1	67	ug/kg	04/04/2021 1511
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	04/04/2021 1511
Butyl benzyl phthalate	ND		1	67	ug/kg	04/04/2021 1511
Caprolactam	ND		1	67	ug/kg	04/04/2021 1511
Carbazole	ND		1	67	ug/kg	04/04/2021 1511
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	04/04/2021 1511
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	04/04/2021 1511
4-Chloroaniline	ND		1	67	ug/kg	04/04/2021 1511
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	04/04/2021 1511
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	04/04/2021 1511
2-Chloronaphthalene	ND		1	67	ug/kg	04/04/2021 1511
2-Chlorophenol	ND		1	67	ug/kg	04/04/2021 1511
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	04/04/2021 1511
Chrysene	ND		1	13	ug/kg	04/04/2021 1511
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	04/04/2021 1511
Dibenzofuran	ND		1	67	ug/kg	04/04/2021 1511
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	04/04/2021 1511
2,4-Dichlorophenol	ND		1	67	ug/kg	04/04/2021 1511
Diethylphthalate	ND		1	67	ug/kg	04/04/2021 1511
Dimethyl phthalate	ND		1	67	ug/kg	04/04/2021 1511
2,4-Dimethylphenol	ND		1	67	ug/kg	04/04/2021 1511
Di-n-butyl phthalate	ND		1	67	ug/kg	04/04/2021 1511
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	04/04/2021 1511
2,4-Dinitrophenol	ND		1	330	ug/kg	04/04/2021 1511
2,4-Dinitrotoluene	ND		1	130	ug/kg	04/04/2021 1511
2,6-Dinitrotoluene	ND		1	130	ug/kg	04/04/2021 1511
Di-n-octylphthalate	ND		1	67	ug/kg	04/04/2021 1511
1,4-Dioxane	ND		1	130	ug/kg	04/04/2021 1511
bis(2-Ethylhexyl)phthalate	ND		1	130	ug/kg	04/04/2021 1511
Fluoranthene	ND		1	13	ug/kg	04/04/2021 1511
Fluorene	ND		1	13	ug/kg	04/04/2021 1511
Hexachlorobenzene	ND		1	67	ug/kg	04/04/2021 1511
Hexachlorobutadiene	ND		1	67	ug/kg	04/04/2021 1511

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ87555-001
Batch: 87555
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachlorocyclopentadiene	ND		1	330	ug/kg	04/04/2021 1511
Hexachloroethane	ND		1	67	ug/kg	04/04/2021 1511
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	04/04/2021 1511
Isophorone	ND		1	67	ug/kg	04/04/2021 1511
2-Methylnaphthalene	ND		1	13	ug/kg	04/04/2021 1511
2-Methylphenol	ND		1	67	ug/kg	04/04/2021 1511
3+4-Methylphenol	ND		1	130	ug/kg	04/04/2021 1511
Naphthalene	ND		1	13	ug/kg	04/04/2021 1511
2-Nitroaniline	ND		1	130	ug/kg	04/04/2021 1511
3-Nitroaniline	ND		1	130	ug/kg	04/04/2021 1511
4-Nitroaniline	ND		1	130	ug/kg	04/04/2021 1511
Nitrobenzene	ND		1	67	ug/kg	04/04/2021 1511
2-Nitrophenol	ND		1	130	ug/kg	04/04/2021 1511
4-Nitrophenol	ND		1	330	ug/kg	04/04/2021 1511
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	04/04/2021 1511
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	04/04/2021 1511
Pentachlorophenol	ND		1	330	ug/kg	04/04/2021 1511
Phenanthrene	ND		1	13	ug/kg	04/04/2021 1511
Phenol	ND		1	67	ug/kg	04/04/2021 1511
Pyrene	ND		1	13	ug/kg	04/04/2021 1511
1,2,4,5-Tetrachlorobenzene	ND		1	67	ug/kg	04/04/2021 1511
2,3,4,6-Tetrachlorophenol	ND		1	130	ug/kg	04/04/2021 1511
2,4,5-Trichlorophenol	ND		1	67	ug/kg	04/04/2021 1511
2,4,6-Trichlorophenol	ND		1	67	ug/kg	04/04/2021 1511

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		74	16-136
Nitrobenzene-d5		65	12-144
Phenol-d5		79	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		81	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ87555-002
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	670	510		1	76	12-111	04/04/2021 1535
Acenaphthylene	670	500		1	75	44-122	04/04/2021 1535
Acetophenone	670	520		1	78	48-111	04/04/2021 1535
Anthracene	670	530		1	79	16-122	04/04/2021 1535
Atrazine	670	460		1	69	48-116	04/04/2021 1535
Benzaldehyde	670	270		1	40	10-110	04/04/2021 1535
Benzo(a)anthracene	670	500		1	74	40-121	04/04/2021 1535
Benzo(a)pyrene	670	600		1	90	36-114	04/04/2021 1535
Benzo(b)fluoranthene	670	550		1	83	38-123	04/04/2021 1535
Benzo(g,h,i)perylene	670	530		1	79	43-120	04/04/2021 1535
Benzo(k)fluoranthene	670	530		1	79	40-126	04/04/2021 1535
1,1'-Biphenyl	670	510		1	77	49-110	04/04/2021 1535
4-Bromophenyl phenyl ether	670	580		1	87	46-118	04/04/2021 1535
Butyl benzyl phthalate	670	530		1	79	46-128	04/04/2021 1535
Caprolactam	670	450		1	68	43-121	04/04/2021 1535
Carbazole	670	540		1	80	47-128	04/04/2021 1535
bis (2-Chloro-1-methylethyl) ether	670	500		1	75	31-102	04/04/2021 1535
4-Chloro-3-methyl phenol	670	490		1	73	49-118	04/04/2021 1535
4-Chloroaniline	670	490		1	74	17-106	04/04/2021 1535
bis(2-Chloroethoxy)methane	670	430		1	64	39-108	04/04/2021 1535
bis(2-Chloroethyl)ether	670	550		1	83	32-105	04/04/2021 1535
2-Chloronaphthalene	670	510		1	76	31-127	04/04/2021 1535
2-Chlorophenol	670	470		1	71	37-106	04/04/2021 1535
4-Chlorophenyl phenyl ether	670	530		1	79	47-116	04/04/2021 1535
Chrysene	670	500		1	75	41-124	04/04/2021 1535
Dibenzo(a,h)anthracene	670	550		1	82	38-125	04/04/2021 1535
Dibenzofuran	670	510		1	77	45-112	04/04/2021 1535
3,3'-Dichlorobenzidine	670	410		1	61	10-119	04/04/2021 1535
2,4-Dichlorophenol	670	470		1	71	41-113	04/04/2021 1535
Diethylphthalate	670	520		1	78	49-123	04/04/2021 1535
Dimethyl phthalate	670	520		1	77	48-120	04/04/2021 1535
2,4-Dimethylphenol	670	460		1	69	33-123	04/04/2021 1535
Di-n-butyl phthalate	670	520		1	78	51-129	04/04/2021 1535
4,6-Dinitro-2-methylphenol	670	600		1	89	40-130	04/04/2021 1535
2,4-Dinitrophenol	1300	1200		1	90	10-113	04/04/2021 1535
2,4-Dinitrotoluene	670	590		1	89	48-124	04/04/2021 1535
2,6-Dinitrotoluene	670	590		1	89	47-125	04/04/2021 1535
Di-n-octylphthalate	670	530		1	80	49-142	04/04/2021 1535
bis(2-Ethylhexyl)phthalate	670	520		1	78	45-128	04/04/2021 1535
Fluoranthene	670	510		1	76	26-133	04/04/2021 1535
Fluorene	670	490		1	73	19-108	04/04/2021 1535
Hexachlorobenzene	670	550		1	82	44-122	04/04/2021 1535
Hexachlorobutadiene	670	490		1	74	33-103	04/04/2021 1535
Hexachlorocyclopentadiene	3300	2600		1	77	18-121	04/04/2021 1535

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ87555-002
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	670	460		1	70	30-96	04/04/2021 1535
Indeno(1,2,3-c,d)pyrene	670	520		1	78	42-123	04/04/2021 1535
Isophorone	670	510		1	77	41-113	04/04/2021 1535
2-Methylnaphthalene	670	500		1	75	10-107	04/04/2021 1535
2-Methylphenol	670	430		1	64	32-107	04/04/2021 1535
3+4-Methylphenol	670	470		1	71	39-108	04/04/2021 1535
Naphthalene	670	500		1	74	10-112	04/04/2021 1535
2-Nitroaniline	670	510		1	76	45-123	04/04/2021 1535
3-Nitroaniline	670	410		1	62	24-127	04/04/2021 1535
4-Nitroaniline	670	490		1	74	48-127	04/04/2021 1535
Nitrobenzene	670	490		1	73	33-114	04/04/2021 1535
2-Nitrophenol	670	500		1	75	35-108	04/04/2021 1535
4-Nitrophenol	1300	1100		1	80	18-154	04/04/2021 1535
N-Nitrosodi-n-propylamine	670	570		1	86	32-115	04/04/2021 1535
N-Nitrosodiphenylamine (Diphenylamine)	670	560		1	84	53-150	04/04/2021 1535
Pentachlorophenol	1300	1000		1	77	27-138	04/04/2021 1535
Phenanthrene	670	510		1	76	16-123	04/04/2021 1535
Phenol	670	420		1	64	36-108	04/04/2021 1535
Pyrene	670	520		1	78	34-121	04/04/2021 1535
1,2,4,5-Tetrachlorobenzene	670	500		1	76	30-130	04/04/2021 1535
2,3,4,6-Tetrachlorophenol	670	450		1	67	53-125	04/04/2021 1535
2,4,5-Trichlorophenol	670	410		1	62	46-122	04/04/2021 1535
2,4,6-Trichlorophenol	670	440		1	66	38-115	04/04/2021 1535

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		69	24-137
2-Fluorophenol		63	16-136
Nitrobenzene-d5		63	12-144
Phenol-d5		64	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		76	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WC23067-009MS
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	ND	820	760		5	93	12-111	04/05/2021 0056
Acenaphthylene	ND	820	800		5	98	44-122	04/05/2021 0056
Acetophenone	ND	820	840		5	103	30-130	04/05/2021 0056
Anthracene	95	820	810		5	87	16-122	04/05/2021 0056
Atrazine	ND	820	650		5	80	30-130	04/05/2021 0056
Benzaldehyde	ND	820	670		5	82	10-110	04/05/2021 0056
Benzo(a)anthracene	590	820	1400		5	102	40-121	04/05/2021 0056
Benzo(a)pyrene	800	820	1700		5	110	36-114	04/05/2021 0056
Benzo(b)fluoranthene	910	820	2200	N	5	164	38-123	04/05/2021 0056
Benzo(g,h,i)perylene	530	820	670	N	5	17	43-120	04/05/2021 0056
Benzo(k)fluoranthene	430	820	1200		5	98	40-126	04/05/2021 0056
1,1'-Biphenyl	ND	820	770		5	94	30-130	04/05/2021 0056
4-Bromophenyl phenyl ether	ND	820	770		5	94	30-130	04/05/2021 0056
Butyl benzyl phthalate	ND	820	760		5	93	30-130	04/05/2021 0056
Caprolactam	ND	820	660		5	81	30-130	04/05/2021 0056
Carbazole	ND	820	830		5	101	30-130	04/05/2021 0056
bis (2-Chloro-1-methylethyl) ether	ND	820	740		5	90	30-130	04/05/2021 0056
4-Chloro-3-methyl phenol	ND	820	750		5	92	30-130	04/05/2021 0056
4-Chloroaniline	ND	820	500		5	61	17-106	04/05/2021 0056
bis(2-Chloroethoxy)methane	ND	820	660		5	80	30-130	04/05/2021 0056
bis(2-Chloroethyl)ether	ND	820	680		5	83	30-130	04/05/2021 0056
2-Chloronaphthalene	ND	820	720		5	88	30-130	04/05/2021 0056
2-Chlorophenol	ND	820	630		5	77	30-130	04/05/2021 0056
4-Chlorophenyl phenyl ether	ND	820	700		5	86	30-130	04/05/2021 0056
Chrysene	660	820	1600		5	120	41-124	04/05/2021 0056
Dibenzo(a,h)anthracene	ND	820	630		5	77	38-125	04/05/2021 0056
Dibenzofuran	ND	820	830		5	102	30-130	04/05/2021 0056
3,3'-Dichlorobenzidine	ND	820	ND	N	5	0.00	10-119	04/05/2021 0056
2,4-Dichlorophenol	ND	820	640		5	79	30-130	04/05/2021 0056
Diethylphthalate	ND	820	770		5	95	30-130	04/05/2021 0056
Dimethyl phthalate	ND	820	720		5	89	30-130	04/05/2021 0056
2,4-Dimethylphenol	ND	820	720		5	89	30-130	04/05/2021 0056
Di-n-butyl phthalate	ND	820	790		5	97	30-130	04/05/2021 0056
4,6-Dinitro-2-methylphenol	ND	820	880		5	108	30-130	04/05/2021 0056
2,4-Dinitrophenol	ND	1600	2800	N	5	169	30-130	04/05/2021 0056
2,4-Dinitrotoluene	ND	820	720		5	88	30-130	04/05/2021 0056
2,6-Dinitrotoluene	ND	820	780		5	95	30-130	04/05/2021 0056
Di-n-octylphthalate	ND	820	800		5	99	30-130	04/05/2021 0056
bis(2-Ethylhexyl)phthalate	ND	820	720		5	88	30-130	04/05/2021 0056
Fluoranthene	960	820	2000		5	133	26-133	04/05/2021 0056
Fluorene	ND	820	700		5	86	19-108	04/05/2021 0056
Hexachlorobenzene	ND	820	650		5	80	30-130	04/05/2021 0056
Hexachlorobutadiene	ND	820	640		5	79	30-130	04/05/2021 0056
Hexachlorocyclopentadiene	ND	4100	810	N	5	20	30-130	04/05/2021 0056

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WC23067-009MS
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	ND	820	670		5	82	30-130	04/05/2021 0056
Indeno(1,2,3-c,d)pyrene	430	820	730	N	5	36	42-123	04/05/2021 0056
Isophorone	ND	820	760		5	94	30-130	04/05/2021 0056
2-Methylnaphthalene	420	820	1100		5	89	10-107	04/05/2021 0056
2-Methylphenol	ND	820	660		5	81	30-130	04/05/2021 0056
3+4-Methylphenol	ND	820	650		5	80	30-130	04/05/2021 0056
Naphthalene	370	820	1000		5	83	10-112	04/05/2021 0056
2-Nitroaniline	ND	820	700		5	86	30-130	04/05/2021 0056
3-Nitroaniline	ND	820	210	N	5	26	30-130	04/05/2021 0056
4-Nitroaniline	ND	820	400		5	49	30-130	04/05/2021 0056
Nitrobenzene	ND	820	900		5	111	30-130	04/05/2021 0056
2-Nitrophenol	ND	820	720		5	88	30-130	04/05/2021 0056
4-Nitrophenol	ND	1600	820		5	50	30-130	04/05/2021 0056
N-Nitrosodi-n-propylamine	ND	820	910		5	111	30-130	04/05/2021 0056
N-Nitrosodiphenylamine (Diphenylamine)	ND	820	770		5	95	30-130	04/05/2021 0056
Pentachlorophenol	ND	1600	1400		5	83	30-130	04/05/2021 0056
Phenanthrene	500	820	1200		5	85	16-123	04/05/2021 0056
Phenol	ND	820	650		5	79	30-130	04/05/2021 0056
Pyrene	980	820	1900		5	114	34-121	04/05/2021 0056
1,2,4,5-Tetrachlorobenzene	ND	820	630		5	77	30-130	04/05/2021 0056
2,3,4,6-Tetrachlorophenol	ND	820	760		5	93	53-125	04/05/2021 0056
2,4,5-Trichlorophenol	ND	820	590		5	73	30-130	04/05/2021 0056
2,4,6-Trichlorophenol	ND	820	580		5	71	30-130	04/05/2021 0056

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		79	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		79	12-144
Phenol-d5		72	26-148
Terphenyl-d14		78	20-127
2,4,6-Tribromophenol		77	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WC23067-009MD
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	850	670		5	79	13	12-111	30	04/05/2021 0121
Acenaphthylene	ND	850	670		5	80	17	44-122	30	04/05/2021 0121
Acetophenone	ND	850	900		5	106	6.9	30-130	40	04/05/2021 0121
Anthracene	95	850	710		5	73	12	16-122	30	04/05/2021 0121
Atrazine	ND	850	620		5	73	4.8	30-130	40	04/05/2021 0121
Benzaldehyde	ND	850	670		5	79	0.93	10-110	40	04/05/2021 0121
Benzo(a)anthracene	590	850	1100		5	56	29	40-121	30	04/05/2021 0121
Benzo(a)pyrene	800	850	1300		5	63	24	36-114	30	04/05/2021 0121
Benzo(b)fluoranthene	910	850	1500	+	5	70	40	38-123	30	04/05/2021 0121
Benzo(g,h,i)perylene	530	850	520	N	5	-1.3	25	43-120	30	04/05/2021 0121
Benzo(k)fluoranthene	430	850	1100		5	74	15	40-126	30	04/05/2021 0121
1,1'-Biphenyl	ND	850	700		5	83	9.0	30-130	40	04/05/2021 0121
4-Bromophenyl phenyl ether	ND	850	670		5	79	13	30-130	40	04/05/2021 0121
Butyl benzyl phthalate	ND	850	650		5	77	15	30-130	40	04/05/2021 0121
Caprolactam	ND	850	570		5	67	15	30-130	40	04/05/2021 0121
Carbazole	ND	850	730		5	86	12	30-130	40	04/05/2021 0121
bis (2-Chloro-1-methylethyl) ether	ND	850	770		5	91	4.3	30-130	40	04/05/2021 0121
4-Chloro-3-methyl phenol	ND	850	610		5	72	21	30-130	40	04/05/2021 0121
4-Chloroaniline	ND	850	490		5	58	0.53	17-106	40	04/05/2021 0121
bis(2-Chloroethoxy)methane	ND	850	560		5	66	16	30-130	40	04/05/2021 0121
bis(2-Chloroethyl)ether	ND	850	660		5	78	3.3	30-130	40	04/05/2021 0121
2-Chloronaphthalene	ND	850	620		5	74	14	30-130	40	04/05/2021 0121
2-Chlorophenol	ND	850	620		5	73	1.6	30-130	40	04/05/2021 0121
4-Chlorophenyl phenyl ether	ND	850	610		5	72	14	30-130	40	04/05/2021 0121
Chrysene	660	850	1200	+	5	61	33	41-124	30	04/05/2021 0121
Dibenzo(a,h)anthracene	ND	850	490		5	58	24	38-125	30	04/05/2021 0121
Dibenzofuran	ND	850	770		5	91	7.5	30-130	40	04/05/2021 0121
3,3'-Dichlorobenzidine	ND	850	ND	N	5	0.00	0.00	10-119	40	04/05/2021 0121
2,4-Dichlorophenol	ND	850	600		5	71	7.2	30-130	40	04/05/2021 0121
Diethylphthalate	ND	850	660		5	78	16	30-130	40	04/05/2021 0121
Dimethyl phthalate	ND	850	650		5	77	10	30-130	40	04/05/2021 0121
2,4-Dimethylphenol	ND	850	710		5	84	1.9	30-130	40	04/05/2021 0121
Di-n-butyl phthalate	ND	850	680		5	80	15	30-130	40	04/05/2021 0121
4,6-Dinitro-2-methylphenol	ND	850	870		5	102	1.8	30-130	40	04/05/2021 0121
2,4-Dinitrophenol	ND	1700	2800	N	5	167	2.3	30-130	40	04/05/2021 0121
2,4-Dinitrotoluene	ND	850	630		5	75	13	30-130	40	04/05/2021 0121
2,6-Dinitrotoluene	ND	850	700		5	82	10	30-130	40	04/05/2021 0121
Di-n-octylphthalate	ND	850	720		5	85	11	30-130	40	04/05/2021 0121
bis(2-Ethylhexyl)phthalate	ND	850	660		5	78	8.9	30-130	40	04/05/2021 0121
Fluoranthene	960	850	1500		5	65	30	26-133	30	04/05/2021 0121
Fluorene	ND	850	610		5	72	13	19-108	30	04/05/2021 0121
Hexachlorobenzene	ND	850	630		5	75	3.2	30-130	40	04/05/2021 0121
Hexachlorobutadiene	ND	850	580		5	68	11	30-130	40	04/05/2021 0121
Hexachlorocyclopentadiene	ND	4200	640	N	5	15	23	30-130	40	04/05/2021 0121

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

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P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WC23067-009MD
Batch: 87555
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 04/01/2021 1233

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	850	550		5	65	20	30-130	40	04/05/2021 0121
Indeno(1,2,3-c,d)pyrene	430	850	580	N	5	17	23	42-123	30	04/05/2021 0121
Isophorone	ND	850	690		5	81	11	30-130	40	04/05/2021 0121
2-Methylnaphthalene	420	850	1200		5	97	7.9	10-107	30	04/05/2021 0121
2-Methylphenol	ND	850	640		5	75	4.0	30-130	40	04/05/2021 0121
3+4-Methylphenol	ND	850	640		5	75	2.2	30-130	40	04/05/2021 0121
Naphthalene	370	850	1200		5	94	11	10-112	30	04/05/2021 0121
2-Nitroaniline	ND	850	570		5	67	21	30-130	40	04/05/2021 0121
3-Nitroaniline	ND	850	660	+	5	78	100	30-130	40	04/05/2021 0121
4-Nitroaniline	ND	850	310		5	36	25	30-130	40	04/05/2021 0121
Nitrobenzene	ND	850	810		5	95	11	30-130	40	04/05/2021 0121
2-Nitrophenol	ND	850	600		5	71	17	30-130	40	04/05/2021 0121
4-Nitrophenol	ND	1700	790		5	46	3.7	30-130	40	04/05/2021 0121
N-Nitrosodi-n-propylamine	ND	850	870		5	102	4.8	30-130	40	04/05/2021 0121
N-Nitrosodiphenylamine (Diphenylamine)	ND	850	720		5	85	6.7	30-130	40	04/05/2021 0121
Pentachlorophenol	ND	1700	1200		5	72	11	30-130	40	04/05/2021 0121
Phenanthrene	500	850	1100		5	69	9.2	16-123	30	04/05/2021 0121
Phenol	ND	850	560		5	67	13	30-130	40	04/05/2021 0121
Pyrene	980	850	1400	+	5	44	34	34-121	30	04/05/2021 0121
1,2,4,5-Tetrachlorobenzene	ND	850	540		5	64	15	30-130	40	04/05/2021 0121
2,3,4,6-Tetrachlorophenol	ND	850	730		5	87	3.2	53-125	40	04/05/2021 0121
2,4,5-Trichlorophenol	ND	850	420		5	50	34	30-130	40	04/05/2021 0121
2,4,6-Trichlorophenol	ND	850	500		5	59	15	30-130	40	04/05/2021 0121

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		65	24-137
2-Fluorophenol		59	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		65	26-148
Terphenyl-d14		65	20-127
2,4,6-Tribromophenol		67	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

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P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

Pace Analytical

A

PACE ANALYTICAL SERVICES, LLC
106 Vantage Point Drive · West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.pacelabs.com

Number 118408

Client: AECOM (SCDHEC)	Report to Contact: MARK HARTFORD	Telephone No. / E-mail: 864 234 3586	Quote No.: 24LCL
Address: 2600 Bull ST	Sampler's Signature: x	Analysis (Attach list if more space is needed): SVOC 8270C	Page 1 of 3
City: Columbia	State: SC	Zip Code: 29201	
Project Name: Bramlett Road Site	Printed Name: Jason C Williams		

Project No. | PO. No.

Sample ID / Description (Containers for each sample may be combined on one line)	Collection Date(s)	Collection Time (Military)	Grab / Composite	Matrix: Aqueous	Matrix: Soil	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	HNO3	HCl	H2SO4	NaOH	5035 Kit	Other	Remarks / Cooler I.D.
BRS-001-MVBS	23 March 19	1058	G		X		X							
BRS-001 MVBD		1101												
BRS-002-MVBS		1118												
BRS-002-MVBD		1125												
BRS-007 MVBS		1208												
BRS-007 MVBD		1212												
BRS-011 MVBS		1138												
BRS 011 MVBD		1140												
BRS 012 MVBS		1220												
BRS 012 MVBD		1221												

WC23067

Turn Around Time Required (Prior lab approval required for expedited TAT): [X] Standard [ ] Rush (Specify)

Sample Disposal: [ ] Return to Client [X] Disposal by Lab

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison [ ] Unknown

QC Requirements (Specify): CO1-MVBS Duplicate

	Date	Time		Date	Time
1. Relinquished by: Jason Cassidy	3/23/19	1545	1. Received by		
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: Jorge Hernandez	Date: 3/23/19	Time: 1545

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle): (Yes) No Ice Pack — Receipt Temp. 5.5 °C — Temp Blank: [X] Y [ ] N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: MEDG3N2-01

PACE ANALYTICAL SERVICES, LLC

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106 Vantage Point Drive · West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.pacelabs.com

B

Number L18407

Client: AECOM (SCDHEC)	Report to Contact: MARK HARTFORD	Telephone No. / E-mail: 864 234 3586	Quote No.: 24166
Address: 2600 Bull ST	Sampler's Signature: X	Analysis (Attach list if more space is needed): SVOC 8270E	Page 2 of 3
City: Columbia State: SC Zip Code: 29201	Printed Name: Jason C. Williams		WC23067 MKM
Project Name: Bramlett Road S.t.d			

Project No.	P.O. No.		Grab (G) / Composite (C)	Matrix: Solid / Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Field Filtered	Remarks / Cooler I.D.
Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)										
BRS 004 MVBS	23 March 21	11:10	G	X	X							
BRS 004 MVBD		11:25										
BRS 005 MVBS		12:00										
BRS 005 MVBD		12:05										
BRS 006 MVBS		10:50										
BRS 006 MVBD		10:55										
BRS 009 MVBS (4w)		12:15										
BRS 009 MVBD		12:20										
BRS 010 MVBS		11:38										
BRS 010 MVBD		11:45										

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☑ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify): 001 MVBS Duplicate

	Date	Time		Date	Time
1. Relinquished by: Jason Williams	23 March 21	1545	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by: Jay Goodwin	3/23/21	1545

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle) (Yes) No Ice Pack — Receipt Temp. 5.5 °C — Temp Blank ☑ Y ☐ N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: MS003Ne-01

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www.pacelabs.com

Number 118447

Client: AECOM (SCDHEC)	Report to Contact: MARK HARTFORD	Telephone No. / E-mail: 864 234 3585	Quote No.: 241601
Address: 2600 Bull ST	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 3 of 3
City: Columbia State: SC Zip Code: 29201	Printed Name: Jason C. Williams		WC23067
Project Name: Bramlett Road Site			

Project No.	P.O. No.		Grab / Composite	Matrix: Aqueous / Solid / Wipe / Air	No. of Containers by Preservative Type: Unpres. / HNO3 / H2SO4 / NaOH / ZnAc / NaOH+ZnAc	SVOC 8270E	Remarks / Cooler ID.
Sample ID / Description (Combine for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)					
BRS003-MVRS	23 March 21	1251	G	X	X	X	
BRS003-MVRD		1254					
BRS008-DOTS		1238					
BRS008-DOTD		241					
BRS013-COGS		1235					
BRS013-COGD		1240					
BRS014-COGS		1255					
BRS014 COGD		1300					

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify): 001 MVRS Duplicate

	Date	Time		Date	Time
1. Relinquished by: Greg Collins	23 March 21	1515	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by: Guy Goodnum	3/23/21	1515

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle) (Yes) No Ice Pack — Receipt Temp: 5.5 °C — Temp Blank: ☑ Y ☐ N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: ME003N2-01

PaceAnalytical

Samples Receipt Checklist (SRC) (MED018C-15)
Issuing Authority: Pace ENV - WCOL

Revised:9/29/2020
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: AECOM Cooler Inspected by/date: MEH / 03/23/2021 Lot #: WC21067

Means of receipt: ☐ Pace ☑ Client ☐ UPS ☐ FedEx ☐ Other:

☐ Yes	☑ No		1. Were custody seals present on the cooler?
☐ Yes	☐ No	☑ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 21-443

5.5 / 5.5 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote #

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H_2SO_4, HNO_3, HCl, NaOH using SR # NA.
Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L. (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: JRG2 Date: 03/23/2021

Comments:

Report of Analysis

AECOM
10 Patewood Drive
Building 6, Suite 500
Greenville, SC 29615
Attention: Mark Hartford

Project Name: CSXT Bramlette Road Site

Project Number: 60309562

Lot Number:**WF09039**

Date Completed:06/25/2021

Kathy Smith

06/25/2021 3:53 PM
Approved and released by:
Project Manager II: **Kathy E. Smith**

The electronic signature above is the equivalent of a handwritten signature.

Case Narrative
AECOM
Lot Number: WF09039

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

Semivolatiles
The LCS associated with batch 95220 had Capropactam and bis(2-Chloroethyl)ether recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for this compound in the samples associated with this batch; therefore, data quality is not impacted.

The MS/MSD associated with samples WF09039-001, WF09039-001 had multiple analytes recovered outside of the acceptance limits. The LCS was recovered within the required acceptance limits; therefore, this demonstrates a matrix effect and data quality is not impacted.

Sample Summary
AECOM
Lot Number: WF09039

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	BRS-201-MVB(s)	Solid	06/09/2021 1155	06/09/2021
002	BRS-201-MVB(d)	Solid	06/09/2021 1158	06/09/2021
003	BRS-202-MVB-S	Solid	06/09/2021 1201	06/09/2021
004	BRS-202-MVB-D	Solid	06/09/2021 1205	06/09/2021
005	BRS-203-MVB-S	Solid	06/09/2021 1209	06/09/2021
006	BRS-203-MVB-D	Solid	06/09/2021 1211	06/09/2021
007	BRS-204-MVB-S	Solid	06/09/2021 1217	06/09/2021
008	BRS-204-MVB-D	Solid	06/09/2021 1219	06/09/2021
009	BRS-205-MVB-S	Solid	06/09/2021 1240	06/09/2021
010	BRS-205-MVB-D	Solid	06/09/2021 1242	06/09/2021
011	BRS-206-MVB-S	Solid	06/09/2021 1225	06/09/2021
012	BRS-206-MVB-D	Solid	06/09/2021 1228	06/09/2021
013	BRS-207-MVB-S	Solid	06/09/2021 1233	06/09/2021
014	BRS-207-MVB-D	Solid	06/09/2021 1230	06/09/2021

(14 samples)

Detection Summary

AECOM

Lot Number: WF09039

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	BRS-201-MVB(s)	Solid	Benzo(a)anthracene	8270E	410		ug/kg	7
001	BRS-201-MVB(s)	Solid	Benzo(a)pyrene	8270E	470		ug/kg	7
001	BRS-201-MVB(s)	Solid	Benzo(b)fluoranthene	8270E	750		ug/kg	7
001	BRS-201-MVB(s)	Solid	Benzo(g,h,i)perylene	8270E	310	S	ug/kg	7
001	BRS-201-MVB(s)	Solid	Benzo(k)fluoranthene	8270E	280		ug/kg	7
001	BRS-201-MVB(s)	Solid	Chrysene	8270E	450		ug/kg	7
001	BRS-201-MVB(s)	Solid	Fluoranthene	8270E	690		ug/kg	7
001	BRS-201-MVB(s)	Solid	Indeno(1,2,3-c,d)pyrene	8270E	280	S	ug/kg	8
001	BRS-201-MVB(s)	Solid	2-Methylnaphthalene	8270E	170		ug/kg	8
001	BRS-201-MVB(s)	Solid	Phenanthrene	8270E	270		ug/kg	8
001	BRS-201-MVB(s)	Solid	Pyrene	8270E	610		ug/kg	8
002	BRS-201-MVB(d)	Solid	Benzo(a)anthracene	8270E	46		ug/kg	9
002	BRS-201-MVB(d)	Solid	Benzo(a)pyrene	8270E	59		ug/kg	9
002	BRS-201-MVB(d)	Solid	Benzo(b)fluoranthene	8270E	83		ug/kg	9
002	BRS-201-MVB(d)	Solid	Benzo(g,h,i)perylene	8270E	36		ug/kg	9
002	BRS-201-MVB(d)	Solid	Benzo(k)fluoranthene	8270E	25		ug/kg	9
002	BRS-201-MVB(d)	Solid	Chrysene	8270E	43		ug/kg	9
002	BRS-201-MVB(d)	Solid	Fluoranthene	8270E	73		ug/kg	9
002	BRS-201-MVB(d)	Solid	Indeno(1,2,3-c,d)pyrene	8270E	30		ug/kg	10
002	BRS-201-MVB(d)	Solid	2-Methylnaphthalene	8270E	20		ug/kg	10
002	BRS-201-MVB(d)	Solid	Naphthalene	8270E	18		ug/kg	10
002	BRS-201-MVB(d)	Solid	Phenanthrene	8270E	27		ug/kg	10
002	BRS-201-MVB(d)	Solid	Pyrene	8270E	68		ug/kg	10
003	BRS-202-MVB-S	Solid	Benzo(a)anthracene	8270E	180		ug/kg	11
003	BRS-202-MVB-S	Solid	Benzo(a)pyrene	8270E	210		ug/kg	11
003	BRS-202-MVB-S	Solid	Benzo(b)fluoranthene	8270E	350		ug/kg	11
003	BRS-202-MVB-S	Solid	Benzo(g,h,i)perylene	8270E	120		ug/kg	11
003	BRS-202-MVB-S	Solid	Benzo(k)fluoranthene	8270E	100		ug/kg	11
003	BRS-202-MVB-S	Solid	Chrysene	8270E	210		ug/kg	11
003	BRS-202-MVB-S	Solid	Fluoranthene	8270E	290		ug/kg	11
003	BRS-202-MVB-S	Solid	Indeno(1,2,3-c,d)pyrene	8270E	110		ug/kg	12
003	BRS-202-MVB-S	Solid	Phenanthrene	8270E	85		ug/kg	12
003	BRS-202-MVB-S	Solid	Pyrene	8270E	270		ug/kg	12
004	BRS-202-MVB-D	Solid	Benzo(a)anthracene	8270E	16		ug/kg	13
004	BRS-202-MVB-D	Solid	Benzo(b)fluoranthene	8270E	30		ug/kg	13
004	BRS-202-MVB-D	Solid	Fluoranthene	8270E	19		ug/kg	13
004	BRS-202-MVB-D	Solid	Pyrene	8270E	17		ug/kg	14
005	BRS-203-MVB-S	Solid	Benzo(a)anthracene	8270E	220		ug/kg	15
005	BRS-203-MVB-S	Solid	Benzo(a)pyrene	8270E	200		ug/kg	15
005	BRS-203-MVB-S	Solid	Benzo(b)fluoranthene	8270E	390		ug/kg	15
005	BRS-203-MVB-S	Solid	Chrysene	8270E	150		ug/kg	15
005	BRS-203-MVB-S	Solid	Fluoranthene	8270E	280		ug/kg	15
005	BRS-203-MVB-S	Solid	Pyrene	8270E	250		ug/kg	16
006	BRS-203-MVB-D	Solid	Benzo(b)fluoranthene	8270E	26		ug/kg	17
006	BRS-203-MVB-D	Solid	Fluoranthene	8270E	17		ug/kg	17

Detection Summary (Continued)

Lot Number: WF09039

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	BRS-203-MVB-D	Solid	Pyrene	8270E	15		ug/kg	18
007	BRS-204-MVB-S	Solid	Benzo(a)anthracene	8270E	240		ug/kg	19
007	BRS-204-MVB-S	Solid	Benzo(a)pyrene	8270E	300		ug/kg	19
007	BRS-204-MVB-S	Solid	Benzo(b)fluoranthene	8270E	470		ug/kg	19
007	BRS-204-MVB-S	Solid	Benzo(g,h,i)perylene	8270E	140		ug/kg	19
007	BRS-204-MVB-S	Solid	Benzo(k)fluoranthene	8270E	150		ug/kg	19
007	BRS-204-MVB-S	Solid	Chrysene	8270E	300		ug/kg	19
007	BRS-204-MVB-S	Solid	Fluoranthene	8270E	440		ug/kg	19
007	BRS-204-MVB-S	Solid	Indeno(1,2,3-c,d)pyrene	8270E	130		ug/kg	20
007	BRS-204-MVB-S	Solid	2-Methylnaphthalene	8270E	110		ug/kg	20
007	BRS-204-MVB-S	Solid	Naphthalene	8270E	100		ug/kg	20
007	BRS-204-MVB-S	Solid	Phenanthrene	8270E	190		ug/kg	20
007	BRS-204-MVB-S	Solid	Pyrene	8270E	400		ug/kg	20
008	BRS-204-MVB-D	Solid	Benzo(a)anthracene	8270E	18		ug/kg	21
008	BRS-204-MVB-D	Solid	Benzo(a)pyrene	8270E	17		ug/kg	21
008	BRS-204-MVB-D	Solid	Benzo(b)fluoranthene	8270E	33		ug/kg	21
008	BRS-204-MVB-D	Solid	Chrysene	8270E	15		ug/kg	21
008	BRS-204-MVB-D	Solid	Fluoranthene	8270E	21		ug/kg	21
008	BRS-204-MVB-D	Solid	Pyrene	8270E	20		ug/kg	22
009	BRS-205-MVB-S	Solid	Benzo(a)anthracene	8270E	230		ug/kg	23
009	BRS-205-MVB-S	Solid	Benzo(a)pyrene	8270E	290		ug/kg	23
009	BRS-205-MVB-S	Solid	Benzo(b)fluoranthene	8270E	380		ug/kg	23
009	BRS-205-MVB-S	Solid	Benzo(g,h,i)perylene	8270E	150		ug/kg	23
009	BRS-205-MVB-S	Solid	Benzo(k)fluoranthene	8270E	160		ug/kg	23
009	BRS-205-MVB-S	Solid	Chrysene	8270E	280		ug/kg	23
009	BRS-205-MVB-S	Solid	Fluoranthene	8270E	400		ug/kg	23
009	BRS-205-MVB-S	Solid	Indeno(1,2,3-c,d)pyrene	8270E	150		ug/kg	24
009	BRS-205-MVB-S	Solid	2-Methylnaphthalene	8270E	180		ug/kg	24
009	BRS-205-MVB-S	Solid	Naphthalene	8270E	120		ug/kg	24
009	BRS-205-MVB-S	Solid	Phenanthrene	8270E	190		ug/kg	24
009	BRS-205-MVB-S	Solid	Pyrene	8270E	380		ug/kg	24
010	BRS-205-MVB-D	Solid	Benzo(a)anthracene	8270E	240		ug/kg	25
010	BRS-205-MVB-D	Solid	Benzo(a)pyrene	8270E	260		ug/kg	25
010	BRS-205-MVB-D	Solid	Benzo(b)fluoranthene	8270E	330		ug/kg	25
010	BRS-205-MVB-D	Solid	Benzo(g,h,i)perylene	8270E	99		ug/kg	25
010	BRS-205-MVB-D	Solid	Benzo(k)fluoranthene	8270E	130		ug/kg	25
010	BRS-205-MVB-D	Solid	Chrysene	8270E	260		ug/kg	25
010	BRS-205-MVB-D	Solid	Fluoranthene	8270E	400		ug/kg	25
010	BRS-205-MVB-D	Solid	Indeno(1,2,3-c,d)pyrene	8270E	100		ug/kg	26
010	BRS-205-MVB-D	Solid	2-Methylnaphthalene	8270E	110		ug/kg	26
010	BRS-205-MVB-D	Solid	Naphthalene	8270E	98		ug/kg	26
010	BRS-205-MVB-D	Solid	Phenanthrene	8270E	160		ug/kg	26
010	BRS-205-MVB-D	Solid	Pyrene	8270E	360		ug/kg	26
011	BRS-206-MVB-S	Solid	Acenaphthylene	8270E	86		ug/kg	27
011	BRS-206-MVB-S	Solid	Benzo(a)anthracene	8270E	380		ug/kg	27
011	BRS-206-MVB-S	Solid	Benzo(a)pyrene	8270E	490		ug/kg	27
011	BRS-206-MVB-S	Solid	Benzo(b)fluoranthene	8270E	760		ug/kg	27
011	BRS-206-MVB-S	Solid	Benzo(g,h,i)perylene	8270E	180		ug/kg	27

Detection Summary (Continued)

Lot Number: WF09039

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
011	BRS-206-MVB-S	Solid	Benzo(k)fluoranthene	8270E	230		ug/kg	27
011	BRS-206-MVB-S	Solid	Chrysene	8270E	440		ug/kg	27
011	BRS-206-MVB-S	Solid	Fluoranthene	8270E	770		ug/kg	27
011	BRS-206-MVB-S	Solid	Indeno(1,2,3-c,d)pyrene	8270E	170		ug/kg	28
011	BRS-206-MVB-S	Solid	2-Methylnaphthalene	8270E	410		ug/kg	28
011	BRS-206-MVB-S	Solid	Naphthalene	8270E	330		ug/kg	28
011	BRS-206-MVB-S	Solid	Phenanthrene	8270E	570		ug/kg	28
011	BRS-206-MVB-S	Solid	Pyrene	8270E	710		ug/kg	28
012	BRS-206-MVB-D	Solid	Benzo(a)anthracene	8270E	44		ug/kg	29
012	BRS-206-MVB-D	Solid	Benzo(a)pyrene	8270E	54		ug/kg	29
012	BRS-206-MVB-D	Solid	Benzo(b)fluoranthene	8270E	74		ug/kg	29
012	BRS-206-MVB-D	Solid	Benzo(g,h,i)perylene	8270E	18		ug/kg	29
012	BRS-206-MVB-D	Solid	Benzo(k)fluoranthene	8270E	24		ug/kg	29
012	BRS-206-MVB-D	Solid	Chrysene	8270E	45		ug/kg	29
012	BRS-206-MVB-D	Solid	Fluoranthene	8270E	77		ug/kg	29
012	BRS-206-MVB-D	Solid	Indeno(1,2,3-c,d)pyrene	8270E	18		ug/kg	30
012	BRS-206-MVB-D	Solid	2-Methylnaphthalene	8270E	35		ug/kg	30
012	BRS-206-MVB-D	Solid	Naphthalene	8270E	26		ug/kg	30
012	BRS-206-MVB-D	Solid	Phenanthrene	8270E	50		ug/kg	30
012	BRS-206-MVB-D	Solid	Pyrene	8270E	76		ug/kg	30
013	BRS-207-MVB-S	Solid	Benzo(a)anthracene	8270E	280		ug/kg	31
013	BRS-207-MVB-S	Solid	Benzo(a)pyrene	8270E	360		ug/kg	31
013	BRS-207-MVB-S	Solid	Benzo(b)fluoranthene	8270E	500		ug/kg	31
013	BRS-207-MVB-S	Solid	Benzo(g,h,i)perylene	8270E	230		ug/kg	31
013	BRS-207-MVB-S	Solid	Benzo(k)fluoranthene	8270E	160		ug/kg	31
013	BRS-207-MVB-S	Solid	Chrysene	8270E	340		ug/kg	31
013	BRS-207-MVB-S	Solid	Fluoranthene	8270E	460		ug/kg	31
013	BRS-207-MVB-S	Solid	Indeno(1,2,3-c,d)pyrene	8270E	210		ug/kg	32
013	BRS-207-MVB-S	Solid	2-Methylnaphthalene	8270E	140		ug/kg	32
013	BRS-207-MVB-S	Solid	Naphthalene	8270E	110		ug/kg	32
013	BRS-207-MVB-S	Solid	Phenanthrene	8270E	190		ug/kg	32
013	BRS-207-MVB-S	Solid	Pyrene	8270E	400		ug/kg	32
014	BRS-207-MVB-D	Solid	Benzo(a)anthracene	8270E	23		ug/kg	33
014	BRS-207-MVB-D	Solid	Benzo(a)pyrene	8270E	23		ug/kg	33
014	BRS-207-MVB-D	Solid	Benzo(b)fluoranthene	8270E	38		ug/kg	33
014	BRS-207-MVB-D	Solid	Benzo(g,h,i)perylene	8270E	16		ug/kg	33
014	BRS-207-MVB-D	Solid	Chrysene	8270E	18		ug/kg	33
014	BRS-207-MVB-D	Solid	Fluoranthene	8270E	28		ug/kg	33
014	BRS-207-MVB-D	Solid	Pyrene	8270E	25		ug/kg	34

(132 detections)

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-201-MVB(s)**
Date Sampled: **06/09/2021 1155**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-001**
Matrix: **Solid**
% Solids: **77.0** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	06/21/2021 1223	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		170	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		170	ug/kg	1
Acetophenone	98-86-2	8270E	ND		860	ug/kg	1
Anthracene	120-12-7	8270E	ND		170	ug/kg	1
Atrazine	1912-24-9	8270E	ND		860	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		860	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**410**		**170**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**470**		**170**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**750**		**170**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**310**	**S**	**170**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**280**		**170**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		860	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		860	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND	S	860	ug/kg	1
Caprolactam	105-60-2	8270E	ND	S	860	ug/kg	1
Carbazole	86-74-8	8270E	ND		860	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		860	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		860	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		860	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		860	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		860	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		860	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		860	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		860	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**450**		**170**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		170	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		860	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND	S	860	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		860	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		860	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		860	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		860	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		860	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND	S	4200	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND	S	4200	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1700	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND	S	1700	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND	S	860	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1700	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND	S	1700	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**690**		**170**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		170	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		860	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		860	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-201-MVB(s)**
Date Sampled: **06/09/2021 1155**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-001**
Matrix: **Solid**
% Solids: **77.0** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	06/21/2021 1223	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND	S	4200	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		860	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**280**	**S**	**170**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		860	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**170**		**170**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		860	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1700	ug/kg	1
Naphthalene	91-20-3	8270E	ND		170	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND	S	1700	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND	S	1700	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND	S	1700	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		860	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1700	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		4200	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		860	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		860	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		4200	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**270**		**170**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		860	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**610**		**170**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		860	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1700	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		860	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		860	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		106	24-137
2-Fluorophenol		102	16-136
Nitrobenzene-d5		114	12-144
Phenol-d5		116	26-148
Terphenyl-d14		104	20-127
2,4,6-Tribromophenol		97	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-201-MVB(d)**
Date Sampled: **06/09/2021 1158**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-002**
Matrix: **Solid**
% Solids: **86.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1247	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		15	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		15	ug/kg	1
Acetophenone	98-86-2	8270E	ND		76	ug/kg	1
Anthracene	120-12-7	8270E	ND		15	ug/kg	1
Atrazine	1912-24-9	8270E	ND		76	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		76	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**46**		**15**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**59**		**15**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**83**		**15**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**36**		**15**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**25**		**15**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		76	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		76	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		76	ug/kg	1
Caprolactam	105-60-2	8270E	ND		76	ug/kg	1
Carbazole	86-74-8	8270E	ND		76	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		76	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		76	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		76	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		76	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		76	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		76	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		76	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		76	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**43**		**15**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		15	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		76	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		76	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		76	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		76	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		76	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		76	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		76	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		380	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		380	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		150	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		150	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		76	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		150	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		150	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**73**		**15**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		15	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		76	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		76	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-201-MVB(d)**
Date Sampled: **06/09/2021 1158**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-002**
Matrix: **Solid**
% Solids: **86.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1247	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		380	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		76	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**30**		**15**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		76	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**20**		**15**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		76	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		150	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**18**		**15**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		150	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		150	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		150	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		76	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		150	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		380	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		76	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		76	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		380	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**27**		**15**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		76	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**68**		**15**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		76	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		150	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		76	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		76	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		88	16-136
Nitrobenzene-d5		73	12-144
Phenol-d5		95	26-148
Terphenyl-d14		78	20-127
2,4,6-Tribromophenol		75	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-202-MVB-S**
Date Sampled: **06/09/2021 1201**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-003**
Matrix: **Solid**
% Solids: **86.7** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/21/2021 1312	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		77	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		77	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		77	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**180**		**77**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**210**		**77**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**350**		**77**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**120**		**77**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**100**		**77**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND		390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**210**		**77**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		77	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		750	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		750	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		750	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		750	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**290**		**77**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		77	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-202-MVB-S**
Date Sampled: **06/09/2021 1201**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-003**
Matrix: **Solid**
% Solids: **86.7** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/21/2021 1312	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**110**		**77**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		77	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		750	ug/kg	1
Naphthalene	91-20-3	8270E	ND		77	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		750	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		750	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		750	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		750	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**85**		**77**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**270**		**77**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		750	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		75	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		89	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		67	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-202-MVB-D**
Date Sampled: **06/09/2021 1205**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-004**
Matrix: **Solid**
% Solids: **86.5** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1337	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		15	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		15	ug/kg	1
Acetophenone	98-86-2	8270E	ND		75	ug/kg	1
Anthracene	120-12-7	8270E	ND		15	ug/kg	1
Atrazine	1912-24-9	8270E	ND		75	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		75	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**16**		**15**	**ug/kg**	**1**
Benzo(a)pyrene	50-32-8	8270E	ND		15	ug/kg	1
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**30**		**15**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		15	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		75	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		75	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		75	ug/kg	1
Caprolactam	105-60-2	8270E	ND		75	ug/kg	1
Carbazole	86-74-8	8270E	ND		75	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		75	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		75	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		75	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		75	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		75	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		75	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		75	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		75	ug/kg	1
Chrysene	218-01-9	8270E	ND		15	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		15	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		75	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		75	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		75	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		75	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		75	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		75	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		75	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		370	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		370	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		150	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		150	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		75	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		150	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		150	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**19**		**15**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		15	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		75	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		75	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-202-MVB-D**
Date Sampled: **06/09/2021 1205**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-004**
Matrix: **Solid**
% Solids: **86.5** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1337	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		370	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		75	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		15	ug/kg	1
Isophorone	78-59-1	8270E	ND		75	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		15	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		75	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		150	ug/kg	1
Naphthalene	91-20-3	8270E	ND		15	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		150	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		150	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		150	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		75	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		150	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		370	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		75	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		75	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		370	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		15	ug/kg	1
Phenol	108-95-2	8270E	ND		75	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**17**		**15**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		75	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		150	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		75	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		75	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		81	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		90	26-148
Terphenyl-d14		83	20-127
2,4,6-Tribromophenol		86	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-203-MVB-S**
Date Sampled: **06/09/2021 1209**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-005**
Matrix: **Solid**
% Solids: **83.7** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	06/21/2021 1402	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		150	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		150	ug/kg	1
Acetophenone	98-86-2	8270E	ND		780	ug/kg	1
Anthracene	120-12-7	8270E	ND		150	ug/kg	1
Atrazine	1912-24-9	8270E	ND		780	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		780	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**220**		**150**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**200**		**150**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**390**		**150**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		150	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		150	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		780	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		780	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		780	ug/kg	1
Caprolactam	105-60-2	8270E	ND		780	ug/kg	1
Carbazole	86-74-8	8270E	ND		780	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		780	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		780	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		780	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		780	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		780	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		780	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		780	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		780	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**150**		**150**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		150	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		780	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		780	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		780	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		780	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		780	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		780	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		780	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		3800	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		3800	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1500	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1500	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		780	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		1500	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		1500	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**280**		**150**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		150	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		780	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		780	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-203-MVB-S**
Date Sampled: **06/09/2021 1209**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-005**
Matrix: **Solid**
% Solids: **83.7** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	10	06/21/2021 1402	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		3800	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		780	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		150	ug/kg	1
Isophorone	78-59-1	8270E	ND		780	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		150	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		780	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		1500	ug/kg	1
Naphthalene	91-20-3	8270E	ND		150	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		1500	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		1500	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		1500	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		780	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		1500	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		3800	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		780	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		780	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		3800	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		150	ug/kg	1
Phenol	108-95-2	8270E	ND		780	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**250**		**150**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		780	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		1500	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		780	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		780	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		92	24-137
2-Fluorophenol		75	16-136
Nitrobenzene-d5		93	12-144
Phenol-d5		86	26-148
Terphenyl-d14		90	20-127
2,4,6-Tribromophenol		82	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-203-MVB-D**
Date Sampled: **06/09/2021 1211**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-006**
Matrix: **Solid**
% Solids: **88.6** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1427	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		15	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		15	ug/kg	1
Acetophenone	98-86-2	8270E	ND		74	ug/kg	1
Anthracene	120-12-7	8270E	ND		15	ug/kg	1
Atrazine	1912-24-9	8270E	ND		74	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		74	ug/kg	1
Benzo(a)anthracene	56-55-3	8270E	ND		15	ug/kg	1
Benzo(a)pyrene	50-32-8	8270E	ND		15	ug/kg	1
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**26**		**15**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		15	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		74	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		74	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		74	ug/kg	1
Caprolactam	105-60-2	8270E	ND		74	ug/kg	1
Carbazole	86-74-8	8270E	ND		74	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		74	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		74	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		74	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		74	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		74	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		74	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		74	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		74	ug/kg	1
Chrysene	218-01-9	8270E	ND		15	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		15	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		74	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		74	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		74	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		74	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		74	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		74	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		74	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		370	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		370	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		140	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		140	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		74	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		140	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		140	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**17**		**15**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		15	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		74	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		74	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
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E = Quantitation of compound exceeded the calibration range
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Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-203-MVB-D**
Date Sampled: **06/09/2021 1211**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-006**
Matrix: **Solid**
% Solids: **88.6** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/21/2021 1427	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		370	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		74	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		15	ug/kg	1
Isophorone	78-59-1	8270E	ND		74	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		15	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		74	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		140	ug/kg	1
Naphthalene	91-20-3	8270E	ND		15	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		140	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		140	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		140	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		74	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		140	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		370	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		74	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		74	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		370	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		15	ug/kg	1
Phenol	108-95-2	8270E	ND		74	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**15**		**15**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		74	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		140	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		74	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		74	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		87	24-137
2-Fluorophenol		88	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		96	26-148
Terphenyl-d14		89	20-127
2,4,6-Tribromophenol		91	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-204-MVB-S**
Date Sampled: **06/09/2021 1217**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-007**
Matrix: **Solid**
% Solids: **79.3** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/21/2021 1451	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		81	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		81	ug/kg	1
Acetophenone	98-86-2	8270E	ND		410	ug/kg	1
Anthracene	120-12-7	8270E	ND		81	ug/kg	1
Atrazine	1912-24-9	8270E	ND		410	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		410	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**240**		**81**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**300**		**81**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**470**		**81**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**140**		**81**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**150**		**81**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		410	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		410	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		410	ug/kg	1
Caprolactam	105-60-2	8270E	ND		410	ug/kg	1
Carbazole	86-74-8	8270E	ND		410	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		410	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		410	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		410	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		410	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		410	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		410	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		410	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		410	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**300**		**81**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		81	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		410	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		410	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		410	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		410	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		410	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		410	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		410	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2000	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2000	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		790	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		790	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		410	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		790	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		790	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**440**		**81**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		81	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		410	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		410	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-204-MVB-S**
Date Sampled: **06/09/2021 1217**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-007**
Matrix: **Solid**
% Solids: **79.3** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/21/2021 1451	JCG	06/10/2021 1257	95076

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2000	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		410	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**130**		**81**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		410	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**110**		**81**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		410	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		790	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**100**		**81**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		790	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		790	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		790	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		410	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		790	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2000	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		410	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		410	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2000	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**190**		**81**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		410	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**400**		**81**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		410	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		790	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		410	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		410	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		78	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		81	12-144
Phenol-d5		79	26-148
Terphenyl-d14		73	20-127
2,4,6-Tribromophenol		72	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-204-MVB-D**
Date Sampled: **06/09/2021 1219**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-008**
Matrix: **Solid**
% Solids: **86.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/18/2021 1651	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		15	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		15	ug/kg	1
Acetophenone	98-86-2	8270E	ND		76	ug/kg	1
Anthracene	120-12-7	8270E	ND		15	ug/kg	1
Atrazine	1912-24-9	8270E	ND		76	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		76	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**18**		**15**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**17**		**15**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**33**		**15**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270E	ND		15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		15	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		76	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		76	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		76	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	76	ug/kg	1
Carbazole	86-74-8	8270E	ND		76	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		76	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		76	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		76	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		76	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	76	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		76	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		76	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		76	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**15**		**15**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		15	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		76	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		76	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		76	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		76	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		76	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		76	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		76	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		380	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		380	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		150	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		150	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		76	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		150	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		150	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**21**		**15**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		15	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		76	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		76	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-204-MVB-D**
Date Sampled: **06/09/2021 1219**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-008**
Matrix: **Solid**
% Solids: **86.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/18/2021 1651	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		380	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		76	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		15	ug/kg	1
Isophorone	78-59-1	8270E	ND		76	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		15	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		76	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		150	ug/kg	1
Naphthalene	91-20-3	8270E	ND		15	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		150	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		150	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		150	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		76	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		150	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		380	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		76	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		76	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		380	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		15	ug/kg	1
Phenol	108-95-2	8270E	ND		76	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**20**		**15**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		76	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		150	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		76	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		76	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		89	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		88	26-148
Terphenyl-d14		88	20-127
2,4,6-Tribromophenol		83	27-128

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-205-MVB-S**
Date Sampled: **06/09/2021 1240**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-009**
Matrix: **Solid**
% Solids: **75.4** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 1526	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		88	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		88	ug/kg	1
Acetophenone	98-86-2	8270E	ND		440	ug/kg	1
Anthracene	120-12-7	8270E	ND		88	ug/kg	1
Atrazine	1912-24-9	8270E	ND		440	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		440	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**230**		**88**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**290**		**88**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**380**		**88**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**150**		**88**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**160**		**88**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		440	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		440	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		440	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	440	ug/kg	1
Carbazole	86-74-8	8270E	ND		440	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		440	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		440	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		440	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		440	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	440	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		440	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		440	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		440	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**280**		**88**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		88	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		440	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND	S	440	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		440	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		440	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		440	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		440	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		440	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2200	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2200	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		860	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		860	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND	S	440	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		860	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND	S	860	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**400**		**88**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		88	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		440	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		440	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-205-MVB-S**
Date Sampled: **06/09/2021 1240**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-009**
Matrix: **Solid**
% Solids: **75.4** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 1526	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND	S	2200	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		440	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**150**		**88**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		440	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**180**		**88**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		440	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		860	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**120**		**88**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		860	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		860	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		860	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		440	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		860	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2200	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		440	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		440	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2200	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**190**		**88**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		440	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**380**		**88**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		440	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		860	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		440	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		440	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		108	24-137
2-Fluorophenol		81	16-136
Nitrobenzene-d5		96	12-144
Phenol-d5		72	26-148
Terphenyl-d14		107	20-127
2,4,6-Tribromophenol		71	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-205-MVB-D**
Date Sampled: **06/09/2021 1242**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-010**
Matrix: **Solid**
% Solids: **85.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 2005	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		78	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		78	ug/kg	1
Acetophenone	98-86-2	8270E	ND		390	ug/kg	1
Anthracene	120-12-7	8270E	ND		78	ug/kg	1
Atrazine	1912-24-9	8270E	ND		390	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		390	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**240**		**78**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**260**		**78**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**330**		**78**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**99**		**78**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**130**		**78**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		390	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		390	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		390	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	390	ug/kg	1
Carbazole	86-74-8	8270E	ND		390	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		390	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		390	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		390	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		390	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	390	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		390	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		390	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		390	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**260**		**78**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		78	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		390	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		390	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		390	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		390	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		390	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		390	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		390	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		1900	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		1900	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		760	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		760	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		390	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		760	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		760	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**400**		**78**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		78	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		390	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		390	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-205-MVB-D**
Date Sampled: **06/09/2021 1242**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-010**
Matrix: **Solid**
% Solids: **85.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 2005	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		1900	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**100**		**78**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		390	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**110**		**78**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		390	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		760	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**98**		**78**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		760	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		760	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		760	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		390	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		760	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		1900	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		390	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		390	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		1900	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**160**		**78**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		390	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**360**		**78**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		390	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		760	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		390	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		99	24-137
2-Fluorophenol		88	16-136
Nitrobenzene-d5		93	12-144
Phenol-d5		103	26-148
Terphenyl-d14		101	20-127
2,4,6-Tribromophenol		85	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-206-MVB-S**
Date Sampled: **06/09/2021 1225**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-011**
Matrix: **Solid**
% Solids: **78.4** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 2030	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		83	ug/kg	1
Acenaphthylene	**208-96-8**	**8270E**	**86**		**83**	**ug/kg**	**1**
Acetophenone	98-86-2	8270E	ND		420	ug/kg	1
Anthracene	120-12-7	8270E	ND		83	ug/kg	1
Atrazine	1912-24-9	8270E	ND		420	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		420	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**380**		**83**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**490**		**83**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**760**		**83**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**180**		**83**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**230**		**83**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		420	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		420	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		420	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	420	ug/kg	1
Carbazole	86-74-8	8270E	ND		420	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		420	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		420	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		420	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		420	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	420	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		420	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		420	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		420	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**440**		**83**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		83	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		420	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		420	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		420	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		420	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		420	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		420	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		420	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2100	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2100	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		810	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		810	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		420	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		810	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		810	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**770**		**83**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		83	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		420	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		420	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-206-MVB-S**
Date Sampled: **06/09/2021 1225**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-011**
Matrix: **Solid**
% Solids: **78.4** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/17/2021 2030	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2100	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		420	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**170**		**83**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		420	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**410**		**83**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		420	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		810	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**330**		**83**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		810	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		810	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		810	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		420	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		810	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2100	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		420	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		420	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2100	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**570**		**83**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		420	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**710**		**83**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		420	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		810	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		420	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		420	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		89	24-137
2-Fluorophenol		70	16-136
Nitrobenzene-d5		83	12-144
Phenol-d5		83	26-148
Terphenyl-d14		85	20-127
2,4,6-Tribromophenol		82	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-206-MVB-D**
Date Sampled: **06/09/2021 1228**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-012**
Matrix: **Solid**
% Solids: **81.1** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/17/2021 2055	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		16	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		16	ug/kg	1
Acetophenone	98-86-2	8270E	ND		83	ug/kg	1
Anthracene	120-12-7	8270E	ND		16	ug/kg	1
Atrazine	1912-24-9	8270E	ND		83	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		83	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**44**		**16**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**54**		**16**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**74**		**16**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**18**		**16**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**24**		**16**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		83	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		83	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		83	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	83	ug/kg	1
Carbazole	86-74-8	8270E	ND		83	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		83	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		83	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		83	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		83	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	83	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		83	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		83	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		83	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**45**		**16**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		16	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		83	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		83	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		83	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		83	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		83	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		83	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		83	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		410	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		410	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		160	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		160	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		83	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		160	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		160	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**77**		**16**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		16	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		83	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		83	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-206-MVB-D**
Date Sampled: **06/09/2021 1228**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-012**
Matrix: **Solid**
% Solids: **81.1** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/17/2021 2055	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		410	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		83	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**18**		**16**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		83	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**35**		**16**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		83	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		160	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**26**		**16**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		160	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		160	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		160	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		83	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		160	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		410	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		83	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		83	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		410	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**50**		**16**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		83	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**76**		**16**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		83	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		160	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		83	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		83	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		81	24-137
2-Fluorophenol		75	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		93	26-148
Terphenyl-d14		86	20-127
2,4,6-Tribromophenol		85	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-207-MVB-S**
Date Sampled: **06/09/2021 1233**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-013**
Matrix: **Solid**
% Solids: **77.8** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/18/2021 1716	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		85	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		85	ug/kg	1
Acetophenone	98-86-2	8270E	ND		430	ug/kg	1
Anthracene	120-12-7	8270E	ND		85	ug/kg	1
Atrazine	1912-24-9	8270E	ND		430	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		430	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**280**		**85**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**360**		**85**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**500**		**85**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**230**		**85**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270E**	**160**		**85**	**ug/kg**	**1**
1,1'-Biphenyl	92-52-4	8270E	ND		430	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		430	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		430	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	430	ug/kg	1
Carbazole	86-74-8	8270E	ND		430	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		430	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		430	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		430	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		430	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	430	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		430	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		430	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		430	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**340**		**85**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		85	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		430	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		430	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		430	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		430	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		430	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		430	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		430	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		2100	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		2100	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		830	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		830	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		430	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		830	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		830	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**460**		**85**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		85	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		430	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		430	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-207-MVB-S**
Date Sampled: **06/09/2021 1233**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-013**
Matrix: **Solid**
% Solids: **77.8** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	5	06/18/2021 1716	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		2100	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		430	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270E**	**210**		**85**	**ug/kg**	**1**
Isophorone	78-59-1	8270E	ND		430	ug/kg	1
2-Methylnaphthalene	**91-57-6**	**8270E**	**140**		**85**	**ug/kg**	**1**
2-Methylphenol	95-48-7	8270E	ND		430	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		830	ug/kg	1
Naphthalene	**91-20-3**	**8270E**	**110**		**85**	**ug/kg**	**1**
2-Nitroaniline	88-74-4	8270E	ND		830	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		830	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		830	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		430	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		830	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		2100	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		430	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		430	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		2100	ug/kg	1
Phenanthrene	**85-01-8**	**8270E**	**190**		**85**	**ug/kg**	**1**
Phenol	108-95-2	8270E	ND		430	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**400**		**85**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		430	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		830	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		430	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		430	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		98	24-137
2-Fluorophenol		73	16-136
Nitrobenzene-d5		80	12-144
Phenol-d5		81	26-148
Terphenyl-d14		98	20-127
2,4,6-Tribromophenol		84	27-128

LOQ = Limit of Quantitation
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B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-207-MVB-D**
Date Sampled: **06/09/2021 1230**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-014**
Matrix: **Solid**
% Solids: **88.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/18/2021 1741	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		15	ug/kg	1
Acenaphthylene	208-96-8	8270E	ND		15	ug/kg	1
Acetophenone	98-86-2	8270E	ND		75	ug/kg	1
Anthracene	120-12-7	8270E	ND		15	ug/kg	1
Atrazine	1912-24-9	8270E	ND		75	ug/kg	1
Benzaldehyde	100-52-7	8270E	ND		75	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270E**	**23**		**15**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270E**	**23**		**15**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270E**	**38**		**15**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270E**	**16**		**15**	**ug/kg**	**1**
Benzo(k)fluoranthene	207-08-9	8270E	ND		15	ug/kg	1
1,1'-Biphenyl	92-52-4	8270E	ND		75	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		75	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270E	ND		75	ug/kg	1
Caprolactam	105-60-2	8270E	ND	L	75	ug/kg	1
Carbazole	86-74-8	8270E	ND		75	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		75	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		75	ug/kg	1
4-Chloroaniline	106-47-8	8270E	ND		75	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		75	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND	L	75	ug/kg	1
2-Chloronaphthalene	91-58-7	8270E	ND		75	ug/kg	1
2-Chlorophenol	95-57-8	8270E	ND		75	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		75	ug/kg	1
Chrysene	**218-01-9**	**8270E**	**18**		**15**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		15	ug/kg	1
Dibenzofuran	132-64-9	8270E	ND		75	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		75	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270E	ND		75	ug/kg	1
Diethylphthalate	84-66-2	8270E	ND		75	ug/kg	1
Dimethyl phthalate	131-11-3	8270E	ND		75	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270E	ND		75	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270E	ND		75	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		370	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270E	ND		370	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		150	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		150	ug/kg	1
Di-n-octylphthalate	117-84-0	8270E	ND		75	ug/kg	1
1,4-Dioxane	123-91-1	8270E	ND		150	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		150	ug/kg	1
Fluoranthene	**206-44-0**	**8270E**	**28**		**15**	**ug/kg**	**1**
Fluorene	86-73-7	8270E	ND		15	ug/kg	1
Hexachlorobenzene	118-74-1	8270E	ND		75	ug/kg	1
Hexachlorobutadiene	87-68-3	8270E	ND		75	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BRS-207-MVB-D**
Date Sampled: **06/09/2021 1230**
Date Received: **06/09/2021**

Laboratory ID: **WF09039-014**
Matrix: **Solid**
% Solids: **88.2** **06/10/2021 0112**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270E	1	06/18/2021 1741	STM	06/11/2021 1023	95220

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270E	ND		370	ug/kg	1
Hexachloroethane	67-72-1	8270E	ND		75	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		15	ug/kg	1
Isophorone	78-59-1	8270E	ND		75	ug/kg	1
2-Methylnaphthalene	91-57-6	8270E	ND		15	ug/kg	1
2-Methylphenol	95-48-7	8270E	ND		75	ug/kg	1
3+4-Methylphenol	106-44-5	8270E	ND		150	ug/kg	1
Naphthalene	91-20-3	8270E	ND		15	ug/kg	1
2-Nitroaniline	88-74-4	8270E	ND		150	ug/kg	1
3-Nitroaniline	99-09-2	8270E	ND		150	ug/kg	1
4-Nitroaniline	100-01-6	8270E	ND		150	ug/kg	1
Nitrobenzene	98-95-3	8270E	ND		75	ug/kg	1
2-Nitrophenol	88-75-5	8270E	ND		150	ug/kg	1
4-Nitrophenol	100-02-7	8270E	ND		370	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		75	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		75	ug/kg	1
Pentachlorophenol	87-86-5	8270E	ND		370	ug/kg	1
Phenanthrene	85-01-8	8270E	ND		15	ug/kg	1
Phenol	108-95-2	8270E	ND		75	ug/kg	1
Pyrene	**129-00-0**	**8270E**	**25**		**15**	**ug/kg**	**1**
1,2,4,5-Tetrachlorobenzene	95-94-3	8270E	ND		75	ug/kg	1
2,3,4,6-Tetrachlorophenol	58-90-2	8270E	ND		150	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		75	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		75	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		86	24-137
2-Fluorophenol		78	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		84	26-148
Terphenyl-d14		93	20-127
2,4,6-Tribromophenol		88	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

QC Summary

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ95076-001
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	06/21/2021 1109
Acenaphthylene	ND		1	13	ug/kg	06/21/2021 1109
Acetophenone	ND		1	67	ug/kg	06/21/2021 1109
Anthracene	ND		1	13	ug/kg	06/21/2021 1109
Atrazine	ND		1	67	ug/kg	06/21/2021 1109
Benzaldehyde	ND		1	67	ug/kg	06/21/2021 1109
Benzo(a)anthracene	ND		1	13	ug/kg	06/21/2021 1109
Benzo(a)pyrene	ND		1	13	ug/kg	06/21/2021 1109
Benzo(b)fluoranthene	ND		1	13	ug/kg	06/21/2021 1109
Benzo(g,h,i)perylene	ND		1	13	ug/kg	06/21/2021 1109
Benzo(k)fluoranthene	ND		1	13	ug/kg	06/21/2021 1109
1,1'-Biphenyl	ND		1	67	ug/kg	06/21/2021 1109
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	06/21/2021 1109
Butyl benzyl phthalate	ND		1	67	ug/kg	06/21/2021 1109
Caprolactam	ND		1	67	ug/kg	06/21/2021 1109
Carbazole	ND		1	67	ug/kg	06/21/2021 1109
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	06/21/2021 1109
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	06/21/2021 1109
4-Chloroaniline	ND		1	67	ug/kg	06/21/2021 1109
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	06/21/2021 1109
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	06/21/2021 1109
2-Chloronaphthalene	ND		1	67	ug/kg	06/21/2021 1109
2-Chlorophenol	ND		1	67	ug/kg	06/21/2021 1109
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	06/21/2021 1109
Chrysene	ND		1	13	ug/kg	06/21/2021 1109
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	06/21/2021 1109
Dibenzofuran	ND		1	67	ug/kg	06/21/2021 1109
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	06/21/2021 1109
2,4-Dichlorophenol	ND		1	67	ug/kg	06/21/2021 1109
Diethylphthalate	ND		1	67	ug/kg	06/21/2021 1109
Dimethyl phthalate	ND		1	67	ug/kg	06/21/2021 1109
2,4-Dimethylphenol	ND		1	67	ug/kg	06/21/2021 1109
Di-n-butyl phthalate	ND		1	67	ug/kg	06/21/2021 1109
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	06/21/2021 1109
2,4-Dinitrophenol	ND		1	330	ug/kg	06/21/2021 1109
2,4-Dinitrotoluene	ND		1	130	ug/kg	06/21/2021 1109
2,6-Dinitrotoluene	ND		1	130	ug/kg	06/21/2021 1109
Di-n-octylphthalate	ND		1	67	ug/kg	06/21/2021 1109
1,4-Dioxane	ND		1	130	ug/kg	06/21/2021 1109
bis(2-Ethylhexyl)phthalate	ND		1	130	ug/kg	06/21/2021 1109
Fluoranthene	ND		1	13	ug/kg	06/21/2021 1109
Fluorene	ND		1	13	ug/kg	06/21/2021 1109
Hexachlorobenzene	ND		1	67	ug/kg	06/21/2021 1109
Hexachlorobutadiene	ND		1	67	ug/kg	06/21/2021 1109

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ95076-001
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachlorocyclopentadiene	ND		1	330	ug/kg	06/21/2021 1109
Hexachloroethane	ND		1	67	ug/kg	06/21/2021 1109
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	06/21/2021 1109
Isophorone	ND		1	67	ug/kg	06/21/2021 1109
2-Methylnaphthalene	ND		1	13	ug/kg	06/21/2021 1109
2-Methylphenol	ND		1	67	ug/kg	06/21/2021 1109
3+4-Methylphenol	ND		1	130	ug/kg	06/21/2021 1109
Naphthalene	ND		1	13	ug/kg	06/21/2021 1109
2-Nitroaniline	ND		1	130	ug/kg	06/21/2021 1109
3-Nitroaniline	ND		1	130	ug/kg	06/21/2021 1109
4-Nitroaniline	ND		1	130	ug/kg	06/21/2021 1109
Nitrobenzene	ND		1	67	ug/kg	06/21/2021 1109
2-Nitrophenol	ND		1	130	ug/kg	06/21/2021 1109
4-Nitrophenol	ND		1	330	ug/kg	06/21/2021 1109
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	06/21/2021 1109
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	06/21/2021 1109
Pentachlorophenol	ND		1	330	ug/kg	06/21/2021 1109
Phenanthrene	ND		1	13	ug/kg	06/21/2021 1109
Phenol	ND		1	67	ug/kg	06/21/2021 1109
Pyrene	ND		1	13	ug/kg	06/21/2021 1109
1,2,4,5-Tetrachlorobenzene	ND		1	67	ug/kg	06/21/2021 1109
2,3,4,6-Tetrachlorophenol	ND		1	130	ug/kg	06/21/2021 1109
2,4,5-Trichlorophenol	ND		1	67	ug/kg	06/21/2021 1109
2,4,6-Trichlorophenol	ND		1	67	ug/kg	06/21/2021 1109

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		73	24-137
2-Fluorophenol		73	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		81	26-148
Terphenyl-d14		76	20-127
2,4,6-Tribromophenol		74	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ95076-002
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	670	490		1	74	12-111	06/24/2021 1546
Acenaphthylene	670	530		1	80	44-122	06/24/2021 1546
Acetophenone	670	560		1	83	48-111	06/24/2021 1546
Anthracene	670	510		1	77	16-122	06/24/2021 1546
Atrazine	670	510		1	76	48-116	06/24/2021 1546
Benzaldehyde	670	340		1	51	10-110	06/24/2021 1546
Benzo(a)anthracene	670	480		1	72	40-121	06/24/2021 1546
Benzo(a)pyrene	670	620		1	92	36-114	06/24/2021 1546
Benzo(b)fluoranthene	670	500		1	75	38-123	06/24/2021 1546
Benzo(g,h,i)perylene	670	530		1	80	43-120	06/24/2021 1546
Benzo(k)fluoranthene	670	510		1	77	40-126	06/24/2021 1546
1,1'-Biphenyl	670	520		1	78	49-110	06/24/2021 1546
4-Bromophenyl phenyl ether	670	540		1	81	46-118	06/24/2021 1546
Butyl benzyl phthalate	670	560		1	83	46-128	06/24/2021 1546
Caprolactam	670	580		1	87	43-121	06/24/2021 1546
Carbazole	670	540		1	81	47-128	06/24/2021 1546
bis (2-Chloro-1-methylethyl) ether	670	580		1	87	31-102	06/24/2021 1546
4-Chloro-3-methyl phenol	670	470		1	71	49-118	06/24/2021 1546
4-Chloroaniline	670	540		1	82	17-106	06/24/2021 1546
bis(2-Chloroethoxy)methane	670	480		1	72	39-108	06/24/2021 1546
bis(2-Chloroethyl)ether	670	580		1	87	32-105	06/24/2021 1546
2-Chloronaphthalene	670	510		1	76	31-127	06/24/2021 1546
2-Chlorophenol	670	540		1	80	37-106	06/24/2021 1546
4-Chlorophenyl phenyl ether	670	540		1	81	47-116	06/24/2021 1546
Chrysene	670	480		1	72	41-124	06/24/2021 1546
Dibenzo(a,h)anthracene	670	510		1	76	38-125	06/24/2021 1546
Dibenzofuran	670	530		1	80	45-112	06/24/2021 1546
3,3'-Dichlorobenzidine	670	360		1	54	10-119	06/24/2021 1546
2,4-Dichlorophenol	670	490		1	73	41-113	06/24/2021 1546
Diethylphthalate	670	540		1	81	49-123	06/24/2021 1546
Dimethyl phthalate	670	540		1	81	48-120	06/24/2021 1546
2,4-Dimethylphenol	670	580		1	86	33-123	06/24/2021 1546
Di-n-butyl phthalate	670	550		1	83	51-129	06/24/2021 1546
4,6-Dinitro-2-methylphenol	670	450		1	67	40-130	06/24/2021 1546
2,4-Dinitrophenol	1300	900		1	67	10-113	06/24/2021 1546
2,4-Dinitrotoluene	670	600		1	90	48-124	06/24/2021 1546
2,6-Dinitrotoluene	670	590		1	88	47-125	06/24/2021 1546
Di-n-octylphthalate	670	640		1	95	49-142	06/24/2021 1546
bis(2-Ethylhexyl)phthalate	670	620		1	92	45-128	06/24/2021 1546
Fluoranthene	670	510		1	77	26-133	06/24/2021 1546
Fluorene	670	510		1	76	19-108	06/24/2021 1546
Hexachlorobenzene	670	500		1	74	44-122	06/24/2021 1546
Hexachlorobutadiene	670	430		1	65	33-103	06/24/2021 1546
Hexachlorocyclopentadiene	3300	2100		1	62	18-121	06/24/2021 1546

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ95076-002
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	670	410		1	62	30-96	06/24/2021 1546
Indeno(1,2,3-c,d)pyrene	670	520		1	78	42-123	06/24/2021 1546
Isophorone	670	550		1	83	41-113	06/24/2021 1546
2-Methylnaphthalene	670	490		1	73	10-107	06/24/2021 1546
2-Methylphenol	670	530		1	79	32-107	06/24/2021 1546
3+4-Methylphenol	670	540		1	81	39-108	06/24/2021 1546
Naphthalene	670	500		1	75	10-112	06/24/2021 1546
2-Nitroaniline	670	600		1	90	45-123	06/24/2021 1546
3-Nitroaniline	670	510		1	76	24-127	06/24/2021 1546
4-Nitroaniline	670	570		1	86	48-127	06/24/2021 1546
Nitrobenzene	670	440		1	65	33-114	06/24/2021 1546
2-Nitrophenol	670	510		1	76	35-108	06/24/2021 1546
4-Nitrophenol	1300	960		1	72	18-154	06/24/2021 1546
N-Nitrosodi-n-propylamine	670	640		1	96	32-115	06/24/2021 1546
N-Nitrosodiphenylamine (Diphenylamine)	670	510		1	76	53-150	06/24/2021 1546
Pentachlorophenol	1300	680		1	51	27-138	06/24/2021 1546
Phenanthrene	670	500		1	74	16-123	06/24/2021 1546
Phenol	670	520		1	77	36-108	06/24/2021 1546
Pyrene	670	470		1	70	34-121	06/24/2021 1546
1,2,4,5-Tetrachlorobenzene	670	510		1	77	30-130	06/24/2021 1546
2,3,4,6-Tetrachlorophenol	670	450		1	67	53-125	06/24/2021 1546
2,4,5-Trichlorophenol	670	480		1	73	46-122	06/24/2021 1546
2,4,6-Trichlorophenol	670	450		1	67	38-115	06/24/2021 1546

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		77	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		69	12-144
Phenol-d5		89	26-148
Terphenyl-d14		69	20-127
2,4,6-Tribromophenol		66	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WF09039-001MS
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	ND	860	770		10	89	12-111	06/22/2021 2108
Acenaphthylene	ND	860	810		10	94	44-122	06/22/2021 2108
Acetophenone	ND	860	880		10	102	30-130	06/22/2021 2108
Anthracene	ND	860	740		10	85	16-122	06/22/2021 2108
Atrazine	ND	860	780		10	91	30-130	06/22/2021 2108
Benzaldehyde	ND	860	950		10	110	10-110	06/22/2021 2108
Benzo(a)anthracene	410	860	940		10	62	40-121	06/22/2021 2108
Benzo(a)pyrene	470	860	1100		10	73	36-114	06/22/2021 2108
Benzo(b)fluoranthene	750	860	1200		10	52	38-123	06/22/2021 2108
Benzo(g,h,i)perylene	310	860	470	N	10	19	43-120	06/22/2021 2108
Benzo(k)fluoranthene	280	860	870		10	68	40-126	06/22/2021 2108
1,1'-Biphenyl	ND	860	800		10	93	30-130	06/22/2021 2108
4-Bromophenyl phenyl ether	ND	860	810		10	94	30-130	06/22/2021 2108
Butyl benzyl phthalate	ND	860	1400	N	10	166	30-130	06/22/2021 2108
Caprolactam	ND	860	1200	N	10	138	30-130	06/22/2021 2108
Carbazole	ND	860	770		10	90	30-130	06/22/2021 2108
bis (2-Chloro-1-methylethyl) ether	ND	860	880		10	102	30-130	06/22/2021 2108
4-Chloro-3-methyl phenol	ND	860	770		10	89	30-130	06/22/2021 2108
4-Chloroaniline	ND	860	350		10	41	17-106	06/22/2021 2108
bis(2-Chloroethoxy)methane	ND	860	820		10	96	30-130	06/22/2021 2108
bis(2-Chloroethyl)ether	ND	860	850		10	99	30-130	06/22/2021 2108
2-Chloronaphthalene	ND	860	800		10	93	30-130	06/22/2021 2108
2-Chlorophenol	ND	860	780		10	91	30-130	06/22/2021 2108
4-Chlorophenyl phenyl ether	ND	860	840		10	98	30-130	06/22/2021 2108
Chrysene	450	860	940		10	57	41-124	06/22/2021 2108
Dibenzo(a,h)anthracene	ND	860	590		10	69	38-125	06/22/2021 2108
Dibenzofuran	ND	860	850		10	99	30-130	06/22/2021 2108
3,3'-Dichlorobenzidine	ND	860	ND	N	10	0.00	10-119	06/22/2021 2108
2,4-Dichlorophenol	ND	860	720		10	84	30-130	06/22/2021 2108
Diethylphthalate	ND	860	820		10	96	30-130	06/22/2021 2108
Dimethyl phthalate	ND	860	840		10	98	30-130	06/22/2021 2108
2,4-Dimethylphenol	ND	860	980		10	114	30-130	06/22/2021 2108
Di-n-butyl phthalate	ND	860	800		10	93	30-130	06/22/2021 2108
4,6-Dinitro-2-methylphenol	ND	860	1300	N	10	156	30-130	06/22/2021 2108
2,4-Dinitrophenol	ND	1700	2400	N	10	142	30-130	06/22/2021 2108
2,4-Dinitrotoluene	ND	860	1100		10	125	30-130	06/22/2021 2108
2,6-Dinitrotoluene	ND	860	1200	N	10	137	30-130	06/22/2021 2108
Di-n-octylphthalate	ND	860	2100	N	10	238	30-130	06/22/2021 2108
bis(2-Ethylhexyl)phthalate	ND	860	2000	N	10	235	30-130	06/22/2021 2108
Fluoranthene	690	860	1100		10	53	26-133	06/22/2021 2108
Fluorene	ND	860	770		10	89	19-108	06/22/2021 2108
Hexachlorobenzene	ND	860	710		10	82	30-130	06/22/2021 2108
Hexachlorobutadiene	ND	860	700		10	81	30-130	06/22/2021 2108
Hexachlorocyclopentadiene	ND	4300	770	N	10	18	30-130	06/22/2021 2108

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WF09039-001MS
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	ND	860	670		10	78	30-130	06/22/2021 2108
Indeno(1,2,3-c,d)pyrene	280	860	550	N	10	31	42-123	06/22/2021 2108
Isophorone	ND	860	820		10	95	30-130	06/22/2021 2108
2-Methylnaphthalene	170	860	930		10	88	10-107	06/22/2021 2108
2-Methylphenol	ND	860	680		10	79	30-130	06/22/2021 2108
3+4-Methylphenol	ND	860	730		10	85	30-130	06/22/2021 2108
Naphthalene	ND	860	900		10	104	10-112	06/22/2021 2108
2-Nitroaniline	ND	860	1400	N	10	164	30-130	06/22/2021 2108
3-Nitroaniline	ND	860	100	N	10	12	30-130	06/22/2021 2108
4-Nitroaniline	ND	860	1200	N	10	139	30-130	06/22/2021 2108
Nitrobenzene	ND	860	670		10	78	30-130	06/22/2021 2108
2-Nitrophenol	ND	860	740		10	87	30-130	06/22/2021 2108
4-Nitrophenol	ND	1700	1200		10	68	30-130	06/22/2021 2108
N-Nitrosodi-n-propylamine	ND	860	980		10	113	30-130	06/22/2021 2108
N-Nitrosodiphenylamine (Diphenylamine)	ND	860	680		10	79	30-130	06/22/2021 2108
Pentachlorophenol	ND	1700	1800		10	103	30-130	06/22/2021 2108
Phenanthrene	270	860	880		10	70	16-123	06/22/2021 2108
Phenol	ND	860	680		10	79	30-130	06/22/2021 2108
Pyrene	610	860	1100		10	53	34-121	06/22/2021 2108
1,2,4,5-Tetrachlorobenzene	ND	860	750		10	87	30-130	06/22/2021 2108
2,3,4,6-Tetrachlorophenol	ND	860	620		10	71	53-125	06/22/2021 2108
2,4,5-Trichlorophenol	ND	860	610		10	70	30-130	06/22/2021 2108
2,4,6-Trichlorophenol	ND	860	630		10	73	30-130	06/22/2021 2108

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		87	24-137
2-Fluorophenol		76	16-136
Nitrobenzene-d5		95	12-144
Phenol-d5		83	26-148
Terphenyl-d14		77	20-127
2,4,6-Tribromophenol		67	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WF09039-001MD
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	860	760		10	88	1.4	12-111	30	06/22/2021 2133
Acenaphthylene	ND	860	810		10	94	0.36	44-122	30	06/22/2021 2133
Acetophenone	ND	860	820		10	96	6.9	30-130	40	06/22/2021 2133
Anthracene	ND	860	710		10	82	3.5	16-122	30	06/22/2021 2133
Atrazine	ND	860	780		10	90	0.26	30-130	40	06/22/2021 2133
Benzaldehyde	ND	860	830		10	96	14	10-110	40	06/22/2021 2133
Benzo(a)anthracene	410	860	980		10	67	3.8	40-121	30	06/22/2021 2133
Benzo(a)pyrene	470	860	1100		10	77	3.5	36-114	30	06/22/2021 2133
Benzo(b)fluoranthene	750	860	1200		10	57	3.7	38-123	30	06/22/2021 2133
Benzo(g,h,i)perylene	310	860	480	N	10	19	0.79	43-120	30	06/22/2021 2133
Benzo(k)fluoranthene	280	860	880		10	70	2.1	40-126	30	06/22/2021 2133
1,1'-Biphenyl	ND	860	790		10	92	0.53	30-130	40	06/22/2021 2133
4-Bromophenyl phenyl ether	ND	860	790		10	92	2.0	30-130	40	06/22/2021 2133
Butyl benzyl phthalate	ND	860	1400	N	10	164	1.4	30-130	40	06/22/2021 2133
Caprolactam	ND	860	1200	N	10	135	2.5	30-130	40	06/22/2021 2133
Carbazole	ND	860	790		10	92	2.1	30-130	40	06/22/2021 2133
bis (2-Chloro-1-methylethyl) ether	ND	860	740		10	85	18	30-130	40	06/22/2021 2133
4-Chloro-3-methyl phenol	ND	860	740		10	86	3.9	30-130	40	06/22/2021 2133
4-Chloroaniline	ND	860	330		10	39	5.5	17-106	40	06/22/2021 2133
bis(2-Chloroethoxy)methane	ND	860	770		10	90	6.2	30-130	40	06/22/2021 2133
bis(2-Chloroethyl)ether	ND	860	700		10	81	20	30-130	40	06/22/2021 2133
2-Chloronaphthalene	ND	860	780		10	90	2.7	30-130	40	06/22/2021 2133
2-Chlorophenol	ND	860	640		10	74	20	30-130	40	06/22/2021 2133
4-Chlorophenyl phenyl ether	ND	860	810		10	94	3.6	30-130	40	06/22/2021 2133
Chrysene	450	860	990		10	63	5.2	41-124	30	06/22/2021 2133
Dibenzo(a,h)anthracene	ND	860	560		10	65	5.8	38-125	30	06/22/2021 2133
Dibenzofuran	ND	860	850		10	98	0.29	30-130	40	06/22/2021 2133
3,3'-Dichlorobenzidine	ND	860	ND	N	10	0.00	0.00	10-119	40	06/22/2021 2133
2,4-Dichlorophenol	ND	860	670		10	78	7.0	30-130	40	06/22/2021 2133
Diethylphthalate	ND	860	810		10	94	2.1	30-130	40	06/22/2021 2133
Dimethyl phthalate	ND	860	810		10	94	3.8	30-130	40	06/22/2021 2133
2,4-Dimethylphenol	ND	860	950		10	110	3.0	30-130	40	06/22/2021 2133
Di-n-butyl phthalate	ND	860	820		10	95	2.4	30-130	40	06/22/2021 2133
4,6-Dinitro-2-methylphenol	ND	860	1400	N	10	157	0.59	30-130	40	06/22/2021 2133
2,4-Dinitrophenol	ND	1700	2500	N	10	144	1.4	30-130	40	06/22/2021 2133
2,4-Dinitrotoluene	ND	860	1100		10	124	0.46	30-130	40	06/22/2021 2133
2,6-Dinitrotoluene	ND	860	1100	N	10	133	2.9	30-130	40	06/22/2021 2133
Di-n-octylphthalate	ND	860	2000	N	10	236	0.85	30-130	40	06/22/2021 2133
bis(2-Ethylhexyl)phthalate	ND	860	2000	N	10	235	0.089	30-130	40	06/22/2021 2133
Fluoranthene	690	860	1200		10	56	1.9	26-133	30	06/22/2021 2133
Fluorene	ND	860	750		10	87	1.7	19-108	30	06/22/2021 2133
Hexachlorobenzene	ND	860	710		10	83	1.2	30-130	40	06/22/2021 2133
Hexachlorobutadiene	ND	860	620		10	72	11	30-130	40	06/22/2021 2133
Hexachlorocyclopentadiene	ND	4300	790	N	10	18	3.0	30-130	40	06/22/2021 2133

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WF09039-001MD
Batch: 95076
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/10/2021 1257

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	860	640		10	74	5.8	30-130	40	06/22/2021 2133
Indeno(1,2,3-c,d)pyrene	280	860	520	N	10	28	4.2	42-123	30	06/22/2021 2133
Isophorone	ND	860	790		10	92	3.6	30-130	40	06/22/2021 2133
2-Methylnaphthalene	170	860	920		10	86	1.5	10-107	30	06/22/2021 2133
2-Methylphenol	ND	860	610		10	71	9.6	30-130	40	06/22/2021 2133
3+4-Methylphenol	ND	860	680		10	79	7.4	30-130	40	06/22/2021 2133
Naphthalene	ND	860	870		10	101	3.4	10-112	30	06/22/2021 2133
2-Nitroaniline	ND	860	1400	N	10	160	2.9	30-130	40	06/22/2021 2133
3-Nitroaniline	ND	860	94	N	10	11	6.0	30-130	40	06/22/2021 2133
4-Nitroaniline	ND	860	1100	N	10	131	6.0	30-130	40	06/22/2021 2133
Nitrobenzene	ND	860	620		10	72	7.6	30-130	40	06/22/2021 2133
2-Nitrophenol	ND	860	690		10	80	7.3	30-130	40	06/22/2021 2133
4-Nitrophenol	ND	1700	1200		10	69	1.6	30-130	40	06/22/2021 2133
N-Nitrosodi-n-propylamine	ND	860	930		10	108	4.5	30-130	40	06/22/2021 2133
N-Nitrosodiphenylamine (Diphenylamine)	ND	860	710		10	83	5.1	30-130	40	06/22/2021 2133
Pentachlorophenol	ND	1700	1700		10	100	2.5	30-130	40	06/22/2021 2133
Phenanthrene	270	860	860		10	69	1.6	16-123	30	06/22/2021 2133
Phenol	ND	860	580		10	68	16	30-130	40	06/22/2021 2133
Pyrene	610	860	1100		10	60	5.8	34-121	30	06/22/2021 2133
1,2,4,5-Tetrachlorobenzene	ND	860	720		10	83	4.0	30-130	40	06/22/2021 2133
2,3,4,6-Tetrachlorophenol	ND	860	550		10	64	11	53-125	40	06/22/2021 2133
2,4,5-Trichlorophenol	ND	860	670		10	78	10	30-130	40	06/22/2021 2133
2,4,6-Trichlorophenol	ND	860	610		10	71	3.5	30-130	40	06/22/2021 2133

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		86	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		89	12-144
Phenol-d5		74	26-148
Terphenyl-d14		82	20-127
2,4,6-Tribromophenol		67	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ95220-001
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	06/17/2021 1435
Acenaphthylene	ND		1	13	ug/kg	06/17/2021 1435
Acetophenone	ND		1	67	ug/kg	06/17/2021 1435
Anthracene	ND		1	13	ug/kg	06/17/2021 1435
Atrazine	ND		1	67	ug/kg	06/17/2021 1435
Benzaldehyde	ND		1	67	ug/kg	06/17/2021 1435
Benzo(a)anthracene	ND		1	13	ug/kg	06/17/2021 1435
Benzo(a)pyrene	ND		1	13	ug/kg	06/17/2021 1435
Benzo(b)fluoranthene	ND		1	13	ug/kg	06/17/2021 1435
Benzo(g,h,i)perylene	ND		1	13	ug/kg	06/17/2021 1435
Benzo(k)fluoranthene	ND		1	13	ug/kg	06/17/2021 1435
1,1'-Biphenyl	ND		1	67	ug/kg	06/17/2021 1435
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	06/17/2021 1435
Butyl benzyl phthalate	ND		1	67	ug/kg	06/17/2021 1435
Caprolactam	ND		1	67	ug/kg	06/17/2021 1435
Carbazole	ND		1	67	ug/kg	06/17/2021 1435
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	06/17/2021 1435
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	06/17/2021 1435
4-Chloroaniline	ND		1	67	ug/kg	06/17/2021 1435
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	06/17/2021 1435
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	06/17/2021 1435
2-Chloronaphthalene	ND		1	67	ug/kg	06/17/2021 1435
2-Chlorophenol	ND		1	67	ug/kg	06/17/2021 1435
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	06/17/2021 1435
Chrysene	ND		1	13	ug/kg	06/17/2021 1435
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	06/17/2021 1435
Dibenzofuran	ND		1	67	ug/kg	06/17/2021 1435
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	06/17/2021 1435
2,4-Dichlorophenol	ND		1	67	ug/kg	06/17/2021 1435
Diethylphthalate	ND		1	67	ug/kg	06/17/2021 1435
Dimethyl phthalate	ND		1	67	ug/kg	06/17/2021 1435
2,4-Dimethylphenol	ND		1	67	ug/kg	06/17/2021 1435
Di-n-butyl phthalate	ND		1	67	ug/kg	06/17/2021 1435
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	06/17/2021 1435
2,4-Dinitrophenol	ND		1	330	ug/kg	06/17/2021 1435
2,4-Dinitrotoluene	ND		1	130	ug/kg	06/17/2021 1435
2,6-Dinitrotoluene	ND		1	130	ug/kg	06/17/2021 1435
Di-n-octylphthalate	ND		1	67	ug/kg	06/17/2021 1435
1,4-Dioxane	ND		1	130	ug/kg	06/17/2021 1435
bis(2-Ethylhexyl)phthalate	ND		1	130	ug/kg	06/17/2021 1435
Fluoranthene	ND		1	13	ug/kg	06/17/2021 1435
Fluorene	ND		1	13	ug/kg	06/17/2021 1435
Hexachlorobenzene	ND		1	67	ug/kg	06/17/2021 1435
Hexachlorobutadiene	ND		1	67	ug/kg	06/17/2021 1435

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ95220-001
Batch: 95220
Analytical Method: 8270E
Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachlorocyclopentadiene	ND		1	330	ug/kg	06/17/2021 1435
Hexachloroethane	ND		1	67	ug/kg	06/17/2021 1435
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	06/17/2021 1435
Isophorone	ND		1	67	ug/kg	06/17/2021 1435
2-Methylnaphthalene	ND		1	13	ug/kg	06/17/2021 1435
2-Methylphenol	ND		1	67	ug/kg	06/17/2021 1435
3+4-Methylphenol	ND		1	130	ug/kg	06/17/2021 1435
Naphthalene	ND		1	13	ug/kg	06/17/2021 1435
2-Nitroaniline	ND		1	130	ug/kg	06/17/2021 1435
3-Nitroaniline	ND		1	130	ug/kg	06/17/2021 1435
4-Nitroaniline	ND		1	130	ug/kg	06/17/2021 1435
Nitrobenzene	ND		1	67	ug/kg	06/17/2021 1435
2-Nitrophenol	ND		1	130	ug/kg	06/17/2021 1435
4-Nitrophenol	ND		1	330	ug/kg	06/17/2021 1435
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	06/17/2021 1435
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	06/17/2021 1435
Pentachlorophenol	ND		1	330	ug/kg	06/17/2021 1435
Phenanthrene	ND		1	13	ug/kg	06/17/2021 1435
Phenol	ND		1	67	ug/kg	06/17/2021 1435
Pyrene	ND		1	13	ug/kg	06/17/2021 1435
1,2,4,5-Tetrachlorobenzene	ND		1	67	ug/kg	06/17/2021 1435
2,3,4,6-Tetrachlorophenol	ND		1	130	ug/kg	06/17/2021 1435
2,4,5-Trichlorophenol	ND		1	67	ug/kg	06/17/2021 1435
2,4,6-Trichlorophenol	ND		1	67	ug/kg	06/17/2021 1435

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		85	24-137
2-Fluorophenol		83	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		84	26-148
Terphenyl-d14		93	20-127
2,4,6-Tribromophenol		81	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
* = RSD is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ95220-002
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	670	550		1	82	12-111	06/17/2021 1319
Acenaphthylene	670	590		1	88	44-122	06/17/2021 1319
Acetophenone	670	680		1	101	48-111	06/17/2021 1319
Anthracene	670	600		1	89	16-122	06/17/2021 1319
Atrazine	670	680		1	101	48-116	06/17/2021 1319
Benzaldehyde	670	250		1	38	10-110	06/17/2021 1319
Benzo(a)anthracene	670	600		1	90	40-121	06/17/2021 1319
Benzo(a)pyrene	670	660		1	99	36-114	06/17/2021 1319
Benzo(b)fluoranthene	670	600		1	89	38-123	06/17/2021 1319
Benzo(g,h,i)perylene	670	580		1	86	43-120	06/17/2021 1319
Benzo(k)fluoranthene	670	580		1	87	40-126	06/17/2021 1319
1,1'-Biphenyl	670	580		1	87	49-110	06/17/2021 1319
4-Bromophenyl phenyl ether	670	650		1	98	46-118	06/17/2021 1319
Butyl benzyl phthalate	670	630		1	94	46-128	06/17/2021 1319
Caprolactam	670	820	N	1	123	43-121	06/17/2021 1319
Carbazole	670	650		1	97	47-128	06/17/2021 1319
bis (2-Chloro-1-methylethyl) ether	670	590		1	89	31-102	06/17/2021 1319
4-Chloro-3-methyl phenol	670	540		1	81	49-118	06/17/2021 1319
4-Chloroaniline	670	450		1	67	17-106	06/17/2021 1319
bis(2-Chloroethoxy)methane	670	590		1	88	39-108	06/17/2021 1319
bis(2-Chloroethyl)ether	670	700	N	1	106	32-105	06/17/2021 1319
2-Chloronaphthalene	670	590		1	89	31-127	06/17/2021 1319
2-Chlorophenol	670	570		1	85	37-106	06/17/2021 1319
4-Chlorophenyl phenyl ether	670	650		1	97	47-116	06/17/2021 1319
Chrysene	670	600		1	90	41-124	06/17/2021 1319
Dibenzo(a,h)anthracene	670	610		1	91	38-125	06/17/2021 1319
Dibenzofuran	670	610		1	92	45-112	06/17/2021 1319
3,3'-Dichlorobenzidine	670	600		1	90	10-119	06/17/2021 1319
2,4-Dichlorophenol	670	520		1	78	41-113	06/17/2021 1319
Diethylphthalate	670	640		1	95	49-123	06/17/2021 1319
Dimethyl phthalate	670	630		1	94	48-120	06/17/2021 1319
2,4-Dimethylphenol	670	500		1	75	33-123	06/17/2021 1319
Di-n-butyl phthalate	670	640		1	95	51-129	06/17/2021 1319
4,6-Dinitro-2-methylphenol	670	630		1	94	40-130	06/17/2021 1319
2,4-Dinitrophenol	1300	1300		1	100	10-113	06/17/2021 1319
2,4-Dinitrotoluene	670	660		1	98	48-124	06/17/2021 1319
2,6-Dinitrotoluene	670	660		1	100	47-125	06/17/2021 1319
Di-n-octylphthalate	670	610		1	91	49-142	06/17/2021 1319
bis(2-Ethylhexyl)phthalate	670	640		1	96	45-128	06/17/2021 1319
Fluoranthene	670	600		1	90	26-133	06/17/2021 1319
Fluorene	670	580		1	87	19-108	06/17/2021 1319
Hexachlorobenzene	670	640		1	95	44-122	06/17/2021 1319
Hexachlorobutadiene	670	580		1	86	33-103	06/17/2021 1319
Hexachlorocyclopentadiene	3300	2400		1	71	18-121	06/17/2021 1319

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ95220-002
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	670	580		1	88	30-96	06/17/2021 1319
Indeno(1,2,3-c,d)pyrene	670	580		1	87	42-123	06/17/2021 1319
Isophorone	670	690		1	103	41-113	06/17/2021 1319
2-Methylnaphthalene	670	570		1	85	10-107	06/17/2021 1319
2-Methylphenol	670	560		1	84	32-107	06/17/2021 1319
3+4-Methylphenol	670	600		1	89	39-108	06/17/2021 1319
Naphthalene	670	570		1	85	10-112	06/17/2021 1319
2-Nitroaniline	670	760		1	114	45-123	06/17/2021 1319
3-Nitroaniline	670	640		1	96	24-127	06/17/2021 1319
4-Nitroaniline	670	830		1	125	48-127	06/17/2021 1319
Nitrobenzene	670	530		1	80	33-114	06/17/2021 1319
2-Nitrophenol	670	570		1	85	35-108	06/17/2021 1319
4-Nitrophenol	1300	840		1	63	18-154	06/17/2021 1319
N-Nitrosodi-n-propylamine	670	750		1	113	32-115	06/17/2021 1319
N-Nitrosodiphenylamine (Diphenylamine)	670	620		1	93	53-150	06/17/2021 1319
Pentachlorophenol	1300	980		1	73	27-138	06/17/2021 1319
Phenanthrene	670	570		1	86	16-123	06/17/2021 1319
Phenol	670	530		1	79	36-108	06/17/2021 1319
Pyrene	670	620		1	93	34-121	06/17/2021 1319
1,2,4,5-Tetrachlorobenzene	670	550		1	82	30-130	06/17/2021 1319
2,3,4,6-Tetrachlorophenol	670	590		1	88	53-125	06/17/2021 1319
2,4,5-Trichlorophenol	670	450		1	67	46-122	06/17/2021 1319
2,4,6-Trichlorophenol	670	540		1	81	38-115	06/17/2021 1319

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		86	24-137
2-Fluorophenol		87	16-136
Nitrobenzene-d5		82	12-144
Phenol-d5		99	26-148
Terphenyl-d14		94	20-127
2,4,6-Tribromophenol		83	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WF09039-009MS
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	ND	860	640		5	75	12-111	06/19/2021 0018
Acenaphthylene	ND	860	710		5	79	44-122	06/19/2021 0018
Acetophenone	ND	860	650		5	75	30-130	06/19/2021 0018
Anthracene	ND	860	660		5	74	16-122	06/19/2021 0018
Atrazine	ND	860	690		5	81	30-130	06/19/2021 0018
Benzaldehyde	ND	860	640		5	75	10-110	06/19/2021 0018
Benzo(a)anthracene	230	860	860		5	73	40-121	06/19/2021 0018
Benzo(a)pyrene	290	860	1100		5	89	36-114	06/19/2021 0018
Benzo(b)fluoranthene	380	860	960		5	68	38-123	06/19/2021 0018
Benzo(g,h,i)perylene	150	860	750		5	70	43-120	06/19/2021 0018
Benzo(k)fluoranthene	160	860	790		5	73	40-126	06/19/2021 0018
1,1'-Biphenyl	ND	860	650		5	76	30-130	06/19/2021 0018
4-Bromophenyl phenyl ether	ND	860	680		5	79	30-130	06/19/2021 0018
Butyl benzyl phthalate	ND	860	1000		5	122	30-130	06/19/2021 0018
Caprolactam	ND	860	890		5	104	30-130	06/19/2021 0018
Carbazole	ND	860	710		5	83	30-130	06/19/2021 0018
bis (2-Chloro-1-methylethyl) ether	ND	860	550		5	64	30-130	06/19/2021 0018
4-Chloro-3-methyl phenol	ND	860	570		5	67	30-130	06/19/2021 0018
4-Chloroaniline	ND	860	300		5	35	17-106	06/19/2021 0018
bis(2-Chloroethoxy)methane	ND	860	600		5	70	30-130	06/19/2021 0018
bis(2-Chloroethyl)ether	ND	860	560		5	65	30-130	06/19/2021 0018
2-Chloronaphthalene	ND	860	630		5	73	30-130	06/19/2021 0018
2-Chlorophenol	ND	860	450		5	53	30-130	06/19/2021 0018
4-Chlorophenyl phenyl ether	ND	860	690		5	80	30-130	06/19/2021 0018
Chrysene	280	860	890		5	71	41-124	06/19/2021 0018
Dibenzo(a,h)anthracene	ND	860	650		5	76	38-125	06/19/2021 0018
Dibenzofuran	ND	860	700		5	82	30-130	06/19/2021 0018
3,3'-Dichlorobenzidine	ND	860	ND	N	5	0.00	10-119	06/19/2021 0018
2,4-Dichlorophenol	ND	860	470		5	55	30-130	06/19/2021 0018
Diethylphthalate	ND	860	690		5	80	30-130	06/19/2021 0018
Dimethyl phthalate	ND	860	680		5	79	30-130	06/19/2021 0018
2,4-Dimethylphenol	ND	860	670		5	78	30-130	06/19/2021 0018
Di-n-butyl phthalate	ND	860	740		5	86	30-130	06/19/2021 0018
4,6-Dinitro-2-methylphenol	ND	860	750		5	87	30-130	06/19/2021 0018
2,4-Dinitrophenol	ND	1700	1300		5	73	30-130	06/19/2021 0018
2,4-Dinitrotoluene	ND	860	840		5	98	30-130	06/19/2021 0018
2,6-Dinitrotoluene	ND	860	840		5	98	30-130	06/19/2021 0018
Di-n-octylphthalate	ND	860	1300	N	5	147	30-130	06/19/2021 0018
bis(2-Ethylhexyl)phthalate	ND	860	1300	N	5	149	30-130	06/19/2021 0018
Fluoranthene	400	860	1100		5	85	26-133	06/19/2021 0018
Fluorene	ND	860	640		5	74	19-108	06/19/2021 0018
Hexachlorobenzene	ND	860	620		5	72	30-130	06/19/2021 0018
Hexachlorobutadiene	ND	860	490		5	57	30-130	06/19/2021 0018
Hexachlorocyclopentadiene	ND	4300	780	N	5	18	30-130	06/19/2021 0018

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD Is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WF09039-009MS
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	ND	860	490		5	57	30-130	06/19/2021 0018
Indeno(1,2,3-c,d)pyrene	150	860	750		5	70	42-123	06/19/2021 0018
Isophorone	ND	860	630		5	74	30-130	06/19/2021 0018
2-Methylnaphthalene	180	860	740		5	65	10-107	06/19/2021 0018
2-Methylphenol	ND	860	610		5	71	30-130	06/19/2021 0018
3+4-Methylphenol	ND	860	630		5	74	30-130	06/19/2021 0018
Naphthalene	120	860	700		5	68	10-112	06/19/2021 0018
2-Nitroaniline	ND	860	920		5	108	30-130	06/19/2021 0018
3-Nitroaniline	ND	860	720		5	84	30-130	06/19/2021 0018
4-Nitroaniline	ND	860	760		5	89	30-130	06/19/2021 0018
Nitrobenzene	ND	860	500		5	58	30-130	06/19/2021 0018
2-Nitrophenol	ND	860	560		5	65	30-130	06/19/2021 0018
4-Nitrophenol	ND	1700	1000		5	59	30-130	06/19/2021 0018
N-Nitrosodi-n-propylamine	ND	860	730		5	85	30-130	06/19/2021 0018
N-Nitrosodiphenylamine (Diphenylamine)	ND	860	630		5	73	30-130	06/19/2021 0018
Pentachlorophenol	ND	1700	950		5	56	30-130	06/19/2021 0018
Phenanthrene	190	860	860		5	78	16-123	06/19/2021 0018
Phenol	ND	860	440		5	51	30-130	06/19/2021 0018
Pyrene	380	860	1000		5	78	34-121	06/19/2021 0018
1,2,4,5-Tetrachlorobenzene	ND	860	580		5	68	30-130	06/19/2021 0018
2,3,4,6-Tetrachlorophenol	ND	860	520		5	61	53-125	06/19/2021 0018
2,4,5-Trichlorophenol	ND	860	510		5	59	30-130	06/19/2021 0018
2,4,6-Trichlorophenol	ND	860	510		5	60	30-130	06/19/2021 0018

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		72	24-137
2-Fluorophenol		50	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		52	26-148
Terphenyl-d14		70	20-127
2,4,6-Tribromophenol		64	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WF09039-009MD
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	870	720		5	83	12	12-111	30	06/19/2021 0042
Acenaphthylene	ND	870	800		5	87	12	44-122	30	06/19/2021 0042
Acetophenone	ND	870	820		5	94	24	30-130	40	06/19/2021 0042
Anthracene	ND	870	740		5	82	12	16-122	30	06/19/2021 0042
Atrazine	ND	870	800		5	92	15	30-130	40	06/19/2021 0042
Benzaldehyde	ND	870	800		5	92	22	10-110	40	06/19/2021 0042
Benzo(a)anthracene	230	870	940		5	81	8.9	40-121	30	06/19/2021 0042
Benzo(a)pyrene	290	870	1100		5	99	8.9	36-114	30	06/19/2021 0042
Benzo(b)fluoranthene	380	870	1000		5	76	7.6	38-123	30	06/19/2021 0042
Benzo(g,h,i)perylene	150	870	760		5	70	1.6	43-120	30	06/19/2021 0042
Benzo(k)fluoranthene	160	870	870		5	82	10	40-126	30	06/19/2021 0042
1,1'-Biphenyl	ND	870	750		5	86	14	30-130	40	06/19/2021 0042
4-Bromophenyl phenyl ether	ND	870	770		5	88	12	30-130	40	06/19/2021 0042
Butyl benzyl phthalate	ND	870	1100		5	129	7.0	30-130	40	06/19/2021 0042
Caprolactam	ND	870	970		5	111	8.8	30-130	40	06/19/2021 0042
Carbazole	ND	870	800		5	91	11	30-130	40	06/19/2021 0042
bis (2-Chloro-1-methylethyl) ether	ND	870	690		5	79	22	30-130	40	06/19/2021 0042
4-Chloro-3-methyl phenol	ND	870	660		5	76	15	30-130	40	06/19/2021 0042
4-Chloroaniline	ND	870	350		5	40	16	17-106	40	06/19/2021 0042
bis(2-Chloroethoxy)methane	ND	870	710		5	81	16	30-130	40	06/19/2021 0042
bis(2-Chloroethyl)ether	ND	870	680		5	78	20	30-130	40	06/19/2021 0042
2-Chloronaphthalene	ND	870	740		5	85	17	30-130	40	06/19/2021 0042
2-Chlorophenol	ND	870	600		5	69	28	30-130	40	06/19/2021 0042
4-Chlorophenyl phenyl ether	ND	870	790		5	91	14	30-130	40	06/19/2021 0042
Chrysene	280	870	950		5	76	6.8	41-124	30	06/19/2021 0042
Dibenzo(a,h)anthracene	ND	870	650		5	74	0.11	38-125	30	06/19/2021 0042
Dibenzofuran	ND	870	810		5	93	14	30-130	40	06/19/2021 0042
3,3'-Dichlorobenzidine	ND	870	250	+	5	28	200	10-119	40	06/19/2021 0042
2,4-Dichlorophenol	ND	870	570		5	65	18	30-130	40	06/19/2021 0042
Diethylphthalate	ND	870	800		5	91	15	30-130	40	06/19/2021 0042
Dimethyl phthalate	ND	870	770		5	89	13	30-130	40	06/19/2021 0042
2,4-Dimethylphenol	ND	870	860		5	99	25	30-130	40	06/19/2021 0042
Di-n-butyl phthalate	ND	870	850		5	98	14	30-130	40	06/19/2021 0042
4,6-Dinitro-2-methylphenol	ND	870	800		5	92	7.0	30-130	40	06/19/2021 0042
2,4-Dinitrophenol	ND	1700	1400		5	79	9.9	30-130	40	06/19/2021 0042
2,4-Dinitrotoluene	ND	870	930		5	106	10	30-130	40	06/19/2021 0042
2,6-Dinitrotoluene	ND	870	980		5	112	15	30-130	40	06/19/2021 0042
Di-n-octylphthalate	ND	870	1400	N	5	155	7.5	30-130	40	06/19/2021 0042
bis(2-Ethylhexyl)phthalate	ND	870	1400	N	5	160	8.7	30-130	40	06/19/2021 0042
Fluoranthene	400	870	1200		5	93	7.0	26-133	30	06/19/2021 0042
Fluorene	ND	870	730		5	83	13	19-108	30	06/19/2021 0042
Hexachlorobenzene	ND	870	680		5	78	9.9	30-130	40	06/19/2021 0042
Hexachlorobutadiene	ND	870	590		5	68	18	30-130	40	06/19/2021 0042
Hexachlorocyclopentadiene	ND	4400	710	N	5	16	8.9	30-130	40	06/19/2021 0042

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WF09039-009MD
Batch: 95220
Analytical Method: 8270E

Matrix: Solid
Prep Method: 3546
Prep Date: 06/11/2021 1023

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	870	560		5	64	14	30-130	40	06/19/2021 0042
Indeno(1,2,3-c,d)pyrene	150	870	780		5	72	3.7	42-123	30	06/19/2021 0042
Isophorone	ND	870	770		5	88	20	30-130	40	06/19/2021 0042
2-Methylnaphthalene	180	870	870		5	79	16	10-107	30	06/19/2021 0042
2-Methylphenol	ND	870	680		5	78	11	30-130	40	06/19/2021 0042
3+4-Methylphenol	ND	870	730		5	84	14	30-130	40	06/19/2021 0042
Naphthalene	120	870	820		5	80	15	10-112	30	06/19/2021 0042
2-Nitroaniline	ND	870	1000		5	116	9.1	30-130	40	06/19/2021 0042
3-Nitroaniline	ND	870	830		5	95	14	30-130	40	06/19/2021 0042
4-Nitroaniline	ND	870	810		5	93	6.5	30-130	40	06/19/2021 0042
Nitrobenzene	ND	870	560		5	64	11	30-130	40	06/19/2021 0042
2-Nitrophenol	ND	870	690		5	79	21	30-130	40	06/19/2021 0042
4-Nitrophenol	ND	1700	1100		5	64	11	30-130	40	06/19/2021 0042
N-Nitrosodi-n-propylamine	ND	870	910		5	104	22	30-130	40	06/19/2021 0042
N-Nitrosodiphenylamine (Diphenylamine)	ND	870	720		5	83	15	30-130	40	06/19/2021 0042
Pentachlorophenol	ND	1700	1100		5	61	11	30-130	40	06/19/2021 0042
Phenanthrene	190	870	950		5	88	11	16-123	30	06/19/2021 0042
Phenol	ND	870	610		5	69	33	30-130	40	06/19/2021 0042
Pyrene	380	870	1100		5	83	5.0	34-121	30	06/19/2021 0042
1,2,4,5-Tetrachlorobenzene	ND	870	680		5	78	16	30-130	40	06/19/2021 0042
2,3,4,6-Tetrachlorophenol	ND	870	630		5	73	20	53-125	40	06/19/2021 0042
2,4,5-Trichlorophenol	ND	870	610		5	70	19	30-130	40	06/19/2021 0042
2,4,6-Trichlorophenol	ND	870	610		5	70	17	30-130	40	06/19/2021 0042

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		81	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		75	12-144
Phenol-d5		75	26-148
Terphenyl-d14		76	20-127
2,4,6-Tribromophenol		75	27-128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

Pace Analytical

SC DHEC

PACE ANALYTICAL SERVICES, LLC
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.pacelabs.com

Number 121138

Client: 2600 Bull St	Report to Contact:	Telephone No. / E-mail: 803-896-0298	Quote No.: 41601
Address: Columbia	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page ___ of ___
City: Columbia	State: SC	Zip Code: 29201	Printed Name: Jarrett Wilson
Project Name: CSX7 Branchville Rd Site			
Project No.	P.O. No.		

WF09039

KES?

Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)	Matrix: Air / Aqueous / Solid / Non-aqueous	No. of Containers by Preservative Type: Unpres. / HNO3 / HCl / NaOH / Na2S2O3 / ZnAc / NaHSO4	SVOC	Remarks / Cooler I.D.
BRS-201-MVB(S)	6/4/21	11:55				
BRS-201-MVB(D)		12:58				
BRS-202-MVB-S		12:01				
BRS-202-MVB-D		12:05				
BRS-203-MVB-S		12:09				
BRS-203-MVB-D		12:11				
BRS-204-MVB-S		12:17				
BRS-204-MVB-D		12:19				
BRS-205-MVB-S		12:40				
BRS-205-MVB-D		12:42				

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	6/9/21	1511	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by	6/9/21	1511

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on ice (Circle): Yes / No — Ice Pack: — Receipt Temp.: 29.1 °C — Temp Blank: ☑ Y ☐ N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: MF0[illegible]-0

PACE ANALYTICAL SERVICES, LLC

Pace Analytical

SEE PG 1

PACE ANALYTICAL SERVICES, LLC

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.pacelabs.com

Number 121139

Client	Report to Contact	Telephone No. / E-mail	Quote No.
Address	Sampler's Signature	Analysis (Attach list if more space is needed)	Page ___ of ___
City / State / Zip Code	X Printed Name	SVOC	Lot # Bar Code (lab use only)
Project Name			WF09039

Project No.	P.O. No.		Grab / Composite	Matrix: Aqueous / Solid / Wastewater	No of Containers by Preservative Type: Unpres / HCl / HNO3 / H2SO4 / NaOH / Na2S2O3 / Other
Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)			
BRS-206-MVB-S	6/9/21	12:25			
BRS-206-MVB-D		12:28			
BRS-207-MVB-S		12:33			
BRS-207-MVB-D		12:36			

Turn Around Time Required (Prior lab approval required for expedited TAT.)	Sample Disposal	Possible Hazard Identification	QC Requirements (Specify)
☐ Standard ☐ Rush (Specify)	☐ Return to Client ☐ Disposal by Lab	☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown	

	Relinquished by	Date	Time	Received by	Date	Time
1.		6/9/21	15:11			
2.		Date	Time		Date	Time
3.		Date	Time		Date	Time
4.		Date	Time	Laboratory received by	Date: 6/9/21	Time: 1511

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Y / N for Pack
Receipt Temp. 29.5 °C
Temp Blank Y / N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: ME203N2-01

Pace Analytical

Samples Receipt Checklist (SRC) (ME0018C-15)
Issuing Authority: Pace ENV - WCOL

Revised:5/20/2020
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: AECOM / SCDHEC Cooler Inspected by/date: ECL 6/09/21 Lot #: WF04036

Means of receipt: ☐ Pace ☑ Client ☐ UPS ☐ FedEx ☐ Other: _____

☑ Yes	☐ No		1. Were custody seals present on the cooler?	Custody seals on sample containers
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?	

pH Strip ID: _____ Chlorine Strip ID: _____ Tested by: _____

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 21-338

29.1 / 29.1 °C / °C / °C / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C

Method of coolant: ☐ Wet Ice ☐ Ice Packs ☐ Dry Ice ☑ None

☑ Yes	☐ No	☐ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / (email) / face-to-face (circle one).	
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?	
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?	
☑ Yes	☐ No		6. Were sample IDs listed on the COC?	
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?	
☑ Yes	☐ No		8. Was collection date & time listed on the COC?	
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?	
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?	
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?	
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑ Yes	☐ No		13. Was adequate sample volume available?	
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?	
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?	
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?	
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	
☐ Yes	☐ No	☑ NA	19. Were all applicable NH3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?	
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc ..) correctly transcribed from the COC into the comment section in LIMS?	
☑ Yes	☐ No		21. Was the quote number listed on the container label? If yes, Quote # 2460	

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # _____.
Time of preservation _____. If more than one preservative is needed, please note in the comments below.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SR barcode labels applied by: ECL Date: 6-04-21

Comments: