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Sent: Wednesday, October 12, 2022 10:40 AM
To: Hornosky, Tim <hornostr@dhec.sc.gov>
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Subject: FPE Edgefield - Field Source Testing Report

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Tim,
Attached is the final report for the Source Field Testing. Based on the demonstration that the soils are readily amenable to treatment, we have secured funding to proceed with Work Plan Development and Bid Documents. I expect to have a Work Plan to perform the source remediation in 4-6 weeks. At that point, we should meet and review the plans and schedule.

Let me know if you have questions. Thanks.


de maximis, inc.

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**SOURCE AREA REMOVAL AND
TREATMENT FIELD TEST RESULTS
FORMER FEDERAL PACIFIC ELECTRIC COMPANY SITE
EDGEFIELD, SOUTH CAROLINA**

Prepared for

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450 Montbrook Lane
Knoxville, TN 37919

Prepared by

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September 22, 2022

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Background:

Based on the historic soil data collected and reported for the FPE Edgefield Site (Site), including the *Phase II Source Area Investigation Report*, Arcadis, 15DEC2014, and *Phase III Source Area Investigation Report*, Arcadis, 27JAN2016, three primary source areas have been identified: Area 1—Drum Burial Area; Area 7—Degreasing Operational Area; and Area 8—Former Paint Bed Drying Area. A summary of work performed within each primary source areas is provided below:

Area 1—Drum Burial Area (DBA)

Drum excavation activities completed in 1999 are summarized in ATC's Report of Drum Removal Activities. The report explains the breakdown of the DBA into 11 excavation areas ranging in depths from 3 to 11 feet. The three largest areas (Area D, H, and J identified in the ATC report) covered most of the area and were excavated to depths ranging from 6 to 11 ft. Clean backfill was reported to be used in the excavated areas. Backfill was completed with the stockpiled soils from the area that were not stained or highly impacted.

Area 7—Degreasing Operational Area (DOA)

The former manufacturing building was demolished in 2015, leaving only the building slab in place. The DOA characterization included samples from under the slab and no work altering the soils was reported to be completed in that area.

Area 8—Paint Bed Drying Area (PBDA)

When excavating in 1997, ATC and their subcontractor excavated to approximately 12-14 feet. Excavation was stopped to prevent the excavation of groundwater. According to the 1997 "Former Paint Sludge Drying Bed Closure Report," the soil became increasingly moist, indicative of groundwater saturation. The report also specifies clean backfill was brought in to fill the excavated areas back to previous grade. With operation of the onsite pumping since 2009, the depth to water has increased 10-15 feet.

The source areas are presented on the Field Test Soil Sampling Locations Figure 1.

Remedial alternatives outside of the on-site and off-site pumping operations were evaluated. Source Area Removal and Treatment (SART) was chosen as the most cost-effective alternative with which to proceed. Based on the previous data and work completed in these areas, a Field Test was deemed necessary.

A Field Test Work Plan (July 18, 2022) was completed and approved by SCDHEC by letter July 22, 2022, to evaluate the treatment alternative.

The Field Test was performed to collect soil samples for soil lithology confirmation and an evaluation of the proposed treatment method. Knowledge and data gained from this Field Test will be used to support the development of the SART Work Plan.

Introduction and Objectives:

The goal of this Field Test was to obtain data that will optimize and aid in the preparation of the SART Work Plan. Specific objectives of the Field Test Plan were to:

1. Provide confirmation of subsurface lithology, % moisture, total organic carbon (TOC) and specified chlorinated hydrocarbon contaminants data for 1,2-dichloroethane (1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC) from each of the 3 proposed excavation areas.
2. Evaluate the treatment efficiency of a 16-day soil treatment time for the specified CHCs.
3. Determine if the addition of a peroxide solution to the excavated soils will increase the destruction efficiency and decrease treatment time of the specified chlorinated hydrocarbon contaminants 1,2-DCE, PCE, TCE, and VC.

Scope of Work:

The scope of work consisted of collecting soil borings from each of the 3 proposed soil excavation areas. The soil borings were obtained using a Geoprobe 7822. Most soil cores were collected from all 3 areas using a standard 5-foot macro-core (1.75") with an acetate liner. A 2-foot macro-core (1.75") was used at DBA-22 and PBDA-22 for 1 sample each due to difficulty in obtaining a sample. The source areas and boring locations are presented on the Field Test Soil Sampling Locations, **Figure 1**.

Field Test Preparation:

- Prior to mobilization for the field activities, O&M, Inc. updated the site-specific health and safety plan to include requirements for soil sampling with a Geoprobe. A Job Safety Analysis (JSA) was completed for the Geoprobe activities.
- On July 18, 2022, the boring locations were marked by a local surveyor and the subsurface utilities and obstructions around the intrusive work area were verified and marked by Arcadis.
- On July 19, 2022, the area for Field Testing the soil piles was designated and prepared for soil cores. This area was located inside the Warehouse building next to the Treatment System building.
- On July 20, 2022 (Day 0), a daily tailgate safety meeting was conducted that provided the day's activities and the potential hazards with the associated work activities.
- Due to issues with rain and winds the soil piles were not placed outside on the former building foundation. On July 20, 2022 (Day 0), black plastic sheeting was placed on the concrete floor of the testing area in the Warehouse. Each area was labeled with the appropriate excavation location and sample depth.

Soil Boring/Field Testing Activities:

1. Field activities were initiated on July 20, 2022 (Day 0).
2. The Geoprobe was staged at the first boring location. The first location was DBA-22, the second PBDA-22 and the third was DOA-22.
3. The sampling equipment was driven to the appropriate depth interval and a soil core sample collected.

Core samples collected at DBA-22 were from 5-10 feet, 10-15 feet and 15-20 feet below land surface (bls). A 2-foot macro-core (1.75") was used at DBA-22 from 18-22 feet due to difficulty in obtaining a sample.

Core samples collected from PBDA-22 were from 5-10 feet, 15-20 feet, 25-30 feet, 30-35 feet and 35-40 feet bls. The sample from 22-25 feet bls was lost due to damage to the acetate liner. A 2-foot macro-core (1.75") was used at PBDA-22 at 35-38 feet due to difficulty in obtaining a sample.

Core samples collected from DOA-22 were from 10-15 feet, 20-25 feet and 25-30 feet bls.

The boring depth intervals are presented in **Table 1**.

4. After collecting the soil core, the field geologist placed liner caps on the ends and carried to the designated area.
5. The acetate liner was opened by the field geologist. Photographs of each soil core were taken. Soil core photographs are presented in **Attachment A**.
6. Each of the soil cores were screened at multiple depths with a photoionization detector (PID) for the presence of CHCs and recorded in the PID tables. The soil core PID readings are presented in **Table 2**.
7. The field geologist completed a soil core log to provide the lithology. Soil core logs are presented in **Attachment B**.
8. The PID readings from the soil cores were higher than indicated from the previous sampling activities. Based on these readings, multiple samples, instead of the single sample presented in the Work Plan, were collected from each core interval and labeled (Day 0) for offsite laboratory analysis. Soil samples were delivered to Pace Analytical Laboratories in Columbia, SC. The soil samples were analyzed for % moisture and via USEPA Method 8260D for the specified chlorinated hydrocarbon contaminants 1,2-DCE, PCE, TCE, and VC.

Based on PID readings, soil samples collected from DBA-22 were at 8 feet, 10 feet, 13 feet, 16 feet, and 19 feet bls.

Based on PID readings, soil samples collected from PBDA-22 were at 9 feet, 13 feet, 14 feet, 17 feet, 19 feet, 22 feet, 26 feet 31 feet and 36 feet bls.

Based on PID readings, soil samples collected from DOA-22 were at 12 feet, 19 feet, 22 feet, and 29 feet bls.

9. The soil cores were put into discreet piles and photographed. The soil pile photographs are presented in *Attachment D*. The soil from each core was evenly spread approximately 1 inch thick, on a piece of black plastic sheeting in the testing area. The soil piles were thoroughly mixed with a rake and left untouched overnight.
10. On July 21, 2022 (Day 1), the soil pile areas were thoroughly mixed with a rake and any clumps were broken up. Multiple PID readings were taken from each pile and recorded in the soil pile PID tables presented in *Attachment C*. A control PID reading was taken using a Sharpie marker. Soil piles were mixed periodically throughout the day and left untouched overnight.
11. On July 22, 2022 (Day 2), the soil pile areas were mixed. Non-homogenized samples were collected from each pile and labeled appropriately for offsite laboratory analysis. Soil samples were delivered to Pace Analytical Laboratories in Columbia, SC. The soil samples were analyzed via USEPA Method 8260D for the specified chlorinated hydrocarbon contaminants 1,2-DCE, PCE, TCE, and VC.
12. On July 28, 2022 (Day 8), the soil pile areas were mixed. Non-homogenized samples were collected from each pile and labeled appropriately for offsite laboratory analysis. Soil samples were delivered to Pace Analytical Laboratories in Columbia, SC. The soil samples were analyzed via USEPA Method 8260D for the specified chlorinated hydrocarbon contaminants 1,2-DCE, PCE, TCE, and VC.
13. Based on the results of the soil analytical from Day 2 and 8, the Day 16 samples were not collected.
14. Based on the results of the soil analytical the remaining soils from the piles were spread out on the ground surface around each respective soil boring location on September 8th, and the black plastic sheeting was disposed of using a site designated dumpster in accordance with the Field Test Work Plan.

Results

Soil Boring Activities:

The soil boring activities were completed on Day 0. The lithology of the soils collected were not consistent with soil lithology descriptions found in previous reports. The field geologist noted soils were sandier and less clayey than previously reported. In addition, there were no fat clays identified in DBA-22 as described in previous boring logs. The soils were dry and readily amenable to placement into soil piles. The photographs of the soil cores are presented in *Attachment A*. The soil core lithology descriptions are presented in the boring logs in *Attachment B*. The photographs of the soil piles are presented in *Attachment D*.

Soil Analytical Results

The PID readings recorded for the soil boring intervals were typically higher than previously reported. Subsequently, the results of the discrete samples collected from each boring location for laboratory analysis were typically higher than previously recorded.

The PID readings collected on Day 1 and Day 2 for all the soil piles were non-detect

The soil boring and soil pile PID results are presented in *Attachment C*.

The soil core analytical results completed on Day 0 are presented in **Table 2**.

The highest concentrations of the specified chlorinated hydrocarbon contaminants were in PBDA-22. All soil samples from this location had concentrations above both the Regional Screening Level (RSL) (industrial soil and groundwater SSL) for TCE.

At DBA-22, TCE was above the RSL (industrial soil and groundwater SSL) for DBA-22 at depth intervals 5-10 feet and 15-20 feet bls. All samples were above the RSL (groundwater SSL) for TCE. Samples collected at depth intervals 13, 16 and 19 feet were above the RSL (groundwater SSL) for PCE.

At DOA-22 all samples for the specified chlorinated hydrocarbon contaminants were below the RSL (industrial soil and groundwater SSL) but above the RSL (groundwater SSL).

For each sample location, the % moisture was consistent with the dry soils. TOC data was consistent with the sandy low organic content found in the soil core samples.

The soil pile analytical results completed on Day 2 are presented in **Table 3**.

Day 2 analytical results indicated significant reductions in all the soil sample specified chlorinated hydrocarbon contaminants concentrations. DBA-22, PBDA-22, and DOA-22 analysis indicated >99% reductions in concentrations in all respective soil piles. The highest specified chlorinated hydrocarbon contaminant concentration found in all soil piles was from PBDA-22 at a depth interval of 25-30 feet bls. The sample indicated a TCE concentration of 0.017 mg/kg, still a >99% reduction in contaminant mass. The soil pile analytical results completed on Day 2 are presented in **Table 3**.

The soil pile analytical results completed on Day 8 are presented in **Table 3**. The analytical results for Day 8 sampling indicated all specified chlorinated hydrocarbon contaminants were below the detection limit for all compounds.

Based on these analytical results, the Day 16 soil pile samples were not collected.

The soil laboratory analytical results are presented in *Attachment E*.

Conclusions

The purpose of this Field Test Plan was to obtain data to optimize and aid in the preparation of the SART Work Plan. Specific objectives of the Field Test Plan were to confirm the past data collected in these 3 areas, evaluate the treatment efficiency of a 16-day soil treatment timeframe and determine if addition of peroxide would increase the destruction efficiency and treatment time of the specified chlorinated hydrocarbon contaminants.

The results of the field activities indicated differences from the past data presented. The analytical results for the specified chlorinated hydrocarbon contaminants were higher than previously reported. The subsurface lithology and soil types identified were sandier and had less clay content than previously reported. The % moisture and TOC levels were very low, which is typical for the type of soils encountered.

The results did indicate that the proposed treatment of the excavated soils on the former building foundation may pose several issues. Due to the dryness of the soils encountered, dust control and containment of the soil piles may be an issue. Based on these field conditions, it is recommended that the initial short-term

treatment of the soils be completed on the former building foundation then moved into the warehouse for continued treatment, if needed, where conditions could be effectively controlled.



The soils conditions identified by these work activities indicate that they would be amenable and readily treated by the proposed SART activities.

The type of soils, dryness of the soils, TOC levels, PID readings and analytical results indicate that the proposed 16-day treatment timeframe may not be required. The results indicated that a 2 to 8-day timeframe would most likely be adequate. The results indicate that the overall project treatment timeframe may not be dependent on treatment activities but may be dependent on the excavation activities and confirmatory soil analytical turnaround time.

Based on the results of the field activities, the addition of peroxide or other remedial enhancement type products is not required.

The overall goals and objectives for the Field Test were achieved. The results of the Field Test provided adequate updated site data for optimization of the proposed SART activities.



LEGEND	
	SOURCE AREA
1	DRUM BURIAL AREA
2	DRUM STORAGE AREA #1
3	DRUM STORAGE AREA #2
4	DRUM STORAGE AREA #3
5	DRUM STORAGE AREA #4
6	DRUM STORAGE AREA #5
7	DECREASING OPERATIONAL AREA
8	PAINT BED DRYING AREA
9	STORM WATER POND
	ABANDONED RAILROAD GRADE

NOTES

1. SITE MAP BASED ON FILES PROVIDED BY CDM, INC., MAY 2011.
2. HORIZONTAL DATUM IS SOUTH CAROLINA STATE PLANE, (NAD83, FEET).

0 70' 140'

GRAPHIC SCALE

FORMER FEDERAL PACIFIC ELECTRIC SITE
EDGEFIELD, SOUTH CAROLINA

Field Test Soil Sampling Locations

O&M, Inc. | **FIGURE 1**

Table 1

Boring Depth Intervals

Area	Former Boring Location	Current Boring Location	Boring Sample Depth Interval (Feet)		
				Drum Burial Area	
				1	DBA-01
10 to 15					
15 to 20					
Degreasing Operational Area					
7	B-41	DOA-22	10 to 15		
			20 to 25		
			25 to 30		
Paint Bed Drying Area					
8	B-55B	PBDA-22	5 to 10		
			15 to 20		
			25 to 30		
			30 to 35		
			35 to 40		

Table 2

Soil Core Sampling Analytical Results

Area	Location	Soil Core Sample Depth (ft)	Analytical Data						
			7/20/2022 (Day 0)						
Drum Burial Area			PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	Core PID Readings (ppm)	TOC (mg/kg)	% Moisture
1	DBA-22	8	ND	28	3.2UQ	3.2UQ	400	2000	14.9
		10	ND	0.23	0.0053 U	0.005.3 U	300.00	240	12.4
		13	0.078	4.9	0.0058 U	0.0058 U	500.0	860	11.3
		16	0.21	6.7	0.0051 U	0.0051 U	789.0	980	10.7
		19	0.35	5.7	0.0054 U	0.0054 U	1000.0	2200	10.4
Degreasing Operational Area			PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	PID Readings (ppm)	TOC (mg/kg)	% Moisture
7	DOA-22	12	0.3	2.9	5.6 U	5.6 U	54.4	310	23.8
		19	0.06	0.32	5.1 U	5.1 U	107	200 U	13.6
		22	0.0083	0.096	5.3 U	5.3 U	69.1	200 U	17.6
		29	0.52	2.8	320 U	320 U	75.7	190 J	18.9
Former Paint Bed Drying Area			PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	PID Readings (ppm)	TOC (mg/kg)	% Moisture
8	PBDA-22	9	ND	12	0.0057 U	0.0057 U	875	120 J	17.2
		13	ND	9.3	1.1 U	1.1 U	1364	240	11.1
		14	ND	190	7.1 UQ	7.1 UQ	1523	1500	17.6
		17	ND	410	67 UQ	67 UQ	1268	2900	15.5
		19	ND	4300	280UQ	280UQ	1050	1900	11.2
		22	ND	9500	570 UQ	570 UQ	1966	3800	13.5
		26	ND	1800	110 UQ	110 UQ	1967	2000	13.3
		31	ND	13000	580 UQ	580 UQ	1967	3000	14.5
36	ND	2900	140 UQ	140 UQ	1968	1800	15.2		
NOTES: Sample locations were identified based on data collected from the 2016 <i>Phase III Source Area Investigation</i> .							U = Not detected at or above the LOQ J = Estimated result <LOQ and >= DL LOQ = Limit of Quantitation 7/20/2022 data is from individual depths 7/22-7/28 data is from combined soil pile depths		
:Value exceeds RSL (Both industrial soil and groundwater ssl)			100	6					
:Value exceeds RSL (Groundwater SSL)			0.0023	0.018					

Table 3
Soil Pile Sampling Analytical Results

Area	Location	Soil Pile Analytical								
		7/22/2022 (Day 2)				7/28/2022 (Day 8)				
Drum Burial Area		Soil Pile Core Depth (ft)	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride
1	DBA-22	5'-10' Pile 1	0.0069 U	0.0071 U	0.0069 U	0.0069 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U
		10'-15' Pile 2	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
		15'-20' Pile 3	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
Degreasing Operational Area		Soil Pile Core Depth (ft)	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride
7	DOA-22	10'-15' Pile 1	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
		20'-25' Pile 2	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
		25'-30' Pile 3	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
		Clay Pile 4	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
Former Paint Bed Drying Area		Soil Pile Core Depth (ft)	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride	PCE (mg/kg)	TCE (mg/kg)	1,2-DCE	Vinyl Chloride
8	PBDA-22	5'-10' Pile 1	0.0056 U	0.0056U	0.0056U	0.0056U	0.0062 U	0.0062 U	0.0062 U	0.0062 U
		15'-20' Pile 2	0.0065 U	0.0031 J	0.0065 U	0.0065 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U
		25'-30' Pile 3	0.0059 U	0.017	0.0059 U	0.0059 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U
		30'-35' Pile 4	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
		35'-40' Pile 5	0.0063 U	0.0025 J	0.0063 U	0.0063 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U
NOTES: Sample locations were identified based on data collected from the 2016 <i>Phase III Source Area Investigation</i> .						U = Not detected at or above the LOQ J = Estimated result <LOQ and >= DL LOQ = Limit of Quantitation 7/20/2022 data is from individual depths 7/22-7/28 data is from combined soil pile depths				
:Value exceeds RSL (Both industrial soil and groundwater ssl)		100	6							
:Value exceeds RSL (Groundwater SSL)		0.0023	0.018							

ATTACHMENT A

SOIL CORE PHOTOGRAPHS



Figure 1). Location: DBA Depth: 1-5 ft



Figure 2). Location: DBA Depth: 5-10 ft



Figure 3). Location: DBA Depth: 10-15 ft



Figure 4). Location: DBA Depth: 15- 20 ft

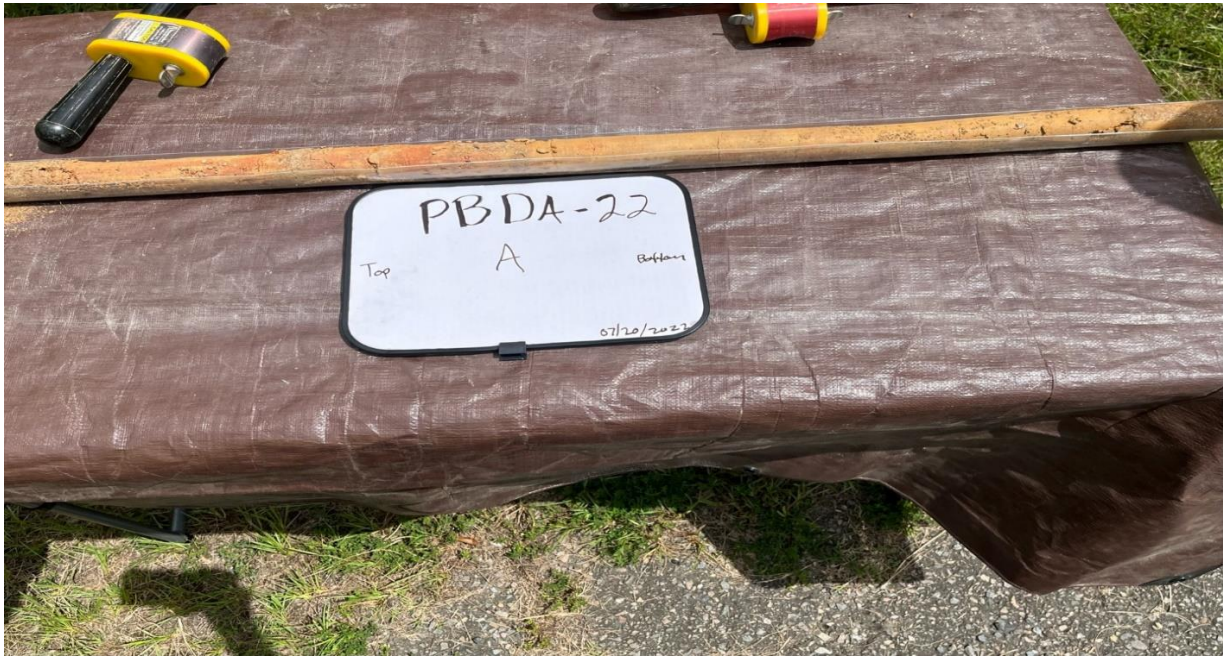


Figure 5). Location: PBDA Depth: 5-10 ft



Figure 6). Location: PBDA Depth: 10 ft- 15 ft



Figure 6). Location: PBDA Depth: 15- 20 ft

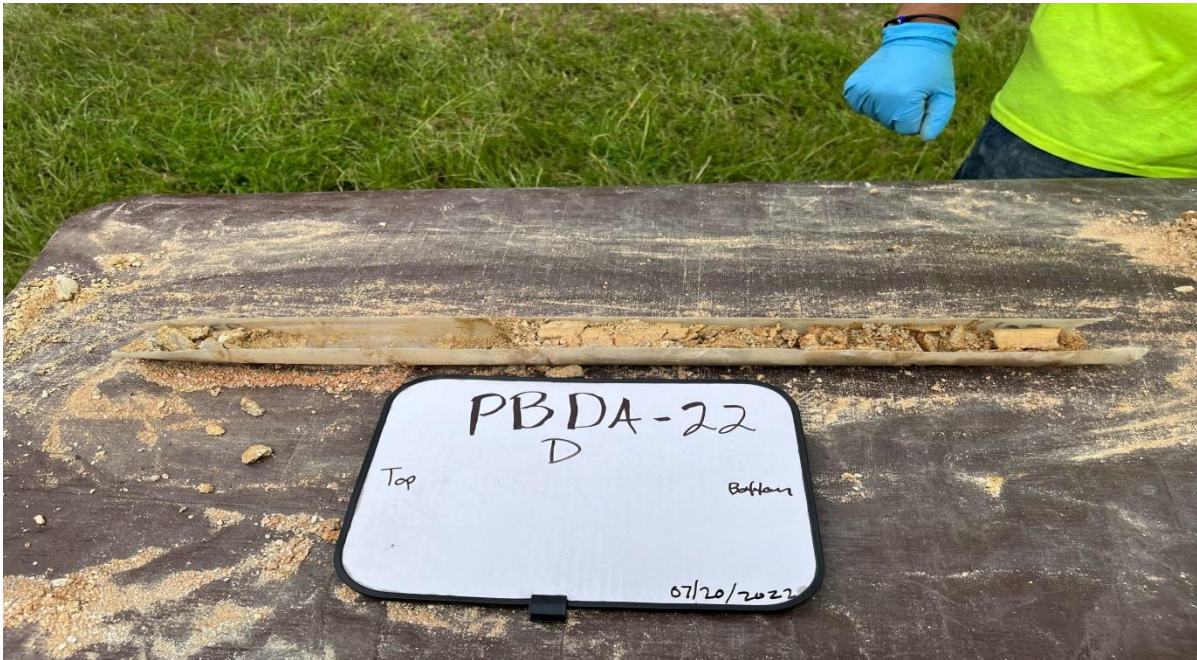


Figure 7). Location: PBDA Depth: 20-22 ft This sample was damaged during coring process



Figure 8). Location: PBDA Depth: 25- 30 ft



Figure 9). Location: PBDA Depth: 30-35 ft



Figure 10). Location: PBDA Depth: 35-38 ft



Figure 11). Location: DOA Depth: 1-5 ft



Figure 12). Location: DOA Depth: 5-10 ft



Figure 13). Location: DOA Depth: 10-15ft



Figure 14). Location: DOA Depth: 15-20 ft



Figure 15). Location: DOA Depth: 20-25 ft



Figure 16). Location: DOA, Depth: 25ft-30ft




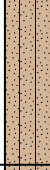


ATTACHMENT B

SOIL CORE LOGS

FEP Edgefield
Site Investigation
Edgefield, SC
Project # 276

Date Started : 7/20/22
Date Completed : 7/20/22
Hole Diameter : 3.5 in.
Drilling Method : DPT
Sampling Method : DT 35

Drilling Company : IET
Company Rep. : Marcello Gonzales
Northing :
Easting :
Logged By : F. McKay

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION
0				No Sample the first 5'
5		SM		Sand; White - Orange, Mottled, Silty - Sand, Fine to Medium Grain Sand, (SM), Moderately Hard, Weathered Mica, Dry
10		SW		Sand; White - Orange, Mottled, Fine to Medium Grain Sand, (SW), Mica, Dry
15		SM		Sand; White - Orange, Mottled, Some black grains, Silty - Sand, (SM), Moderatly Hard, Mica, Some layers of Black and Brown staining, Dry
20		SM		Sand; White - Tan with black grains, Silty - Fine to Medium Grain Sand, (SM), Moderately Hard, Some color Layering at 17' to 18', Slightly Moist. * Refusal with 3.5" sampler at 19' moving 5' West
20		SM		Sand; Same as Above, Refusal at 18' with 3.5" sampler in New Hole and switching to the MC sampler (2") in the same Hole
20		SM		Same as Above to 20', Refusal with MC sampler at 20'
25				
30				
35				
40				

FEP Edgefield
Site Investigation
Edgefield, SC
Project # 276

Date Started : 7/20/22
Date Completed : 7/20/22
Hole Diameter : 2 in.
Drilling Method : DPT
Sampling Method : MC

Drilling Company : IET
Company Rep. : Marcello Gonzales
Northing :
Easting :
Logged By : F. McKay

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION
0		CL-CH		Asphalt / Clay; 2" of Asphalt / Clay; Green-Gray-Black, Clay, (CL-CH), Moderatly Plastic, Hard Slightly Moist
		CL		Clay; Orange - Brown, Sandy - Clay, (CL), Low Placisty, Hard, Dry
		CL		Clay; Tan and Orange, Mottled, Silty - Sandy - Clay, (CL), Moderate Plasticity, Hard, Slightly Moist
5		CL-ML		Clay & Silt; Tan and Orange with white and Black Mica, Clay and Silt, (CL-ML), Very low Plasticity, Hard , Slightly Moist
		SM-ML		Sand & Silt; Tan - White, Silty - Sand and Sandy Silt, (SM-ML), Mica, Moderatly Hard, Slightly Moist
10		SM-ML		Sand & Silt; Tan - Orange, Mottled, Silty - Sand and Sandy - Silt, (SM-ML), Moderitly Hard, Slightly Moist
15		SC-SM		Sand; Tan & Orange, Mottled, Clayey - Silty - Sand, (SC-SM), Moderatly Hard, Slightly Moist
		SM		Sand; Tan, Silty - Sand, (SM), Mica, Moderatly Hard, Slightly Moist
		GM		Gravel; Light Gray, Silty Gravel, (GM), Moist
20		SM		Sand; Tan & Orange, Mottled, Silty - Sand, Mica, Moderatly Hard, Slightly Moist, Thin Gravel layer (.2") at 21'
25		CL-ML		Clay & Silt; Clay and Silt, (CL-ML), Low Plasticity, Moderatly Hard, Slightly Moist
		SM		Sand; Tan with a few Orange Layers, Silty - Sand, (SM), Mica, Soft, Slightly Moist
30				
35				
40				

O & M Inc.

Environmental Services

LOG OF BORING PBDA-22

(Page 1 of 1)

FEP Edgefield

Site Investigation

Edgefield, SC

Project # 276

Date Started : 7/20/22
 Date Completed : 7/20/22
 Hole Diameter : 3.5 in.
 Drilling Method : DPT
 Sampling Method : MC

Drilling Company : IET
 Company Rep. : Marcello Gonzales
 Northing: :
 Easting: :
 Logged By : F. McKay

Depth in Feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION
0		SM		Sand; Brown, Silty-Sand, Fine to Med. Grain some Clay, (SM), Organic Roots, Dry
		SC-SM		Sand; Brown to Red, Clayey-Silty- Sand, (SC-SM), Hard, Mica, Dry
5		SC		Sand; Red, Clayey - Sand, Some silt,(SC), Mica, Hard, Dry
		SM		Sand; Red - Brown, Silty Sand, Some Clay, (SM), Mica, Hard, Dry
		SC-SM		Sand; Orange - Tan, Clayey-Silty-Sand, (SC-SM), Moderatly Hard, Dry
10		SC-SM		Sand; Tan - Orange, Clayey-Silty-Sand, (SC-SM), Slightly Moist
		SC-SM		Sand; Tan - Orange, Clayey - Silty - Fine to Medium Grain Sand, (SC-SM), Moderatly Hard, Slightly Moist
		SC-SM		Sand; Tan - Orange, Clayey - Silty - Fine to Medium Sand, (SC-SM), Some Layers of Red & White with Dark Brown to Black Mica, Moderatly Hard, Slightly Moist
15		SM		Sand; Tan, Silty - Clayey - Fine to Medium Grain Sand, (SM), Moderatly Hard, Slightly Moist
		SM		Sand; Tan to Pink, Silty - Clayey - Fine to Medium Grain Sand, (SM), Moderatly Hard, Slightly Moist
20		SC-SM		Sand; Tan some Orange, Mottled, Clayey - Silty - Sand, (SC-SM), Hard, Slightly Moist
		Lost		Lost Sample
25		SM		Sand; Tan, Silty - Fine to Medium Grain Sand, (SM), Mica, Moderatly Hard, Slightly Moist
		GC		Gravel; Brown and White, Mottled, Clay with Silt and some Sand in Gravel, (GC),
30		SM		Sand; Tan - White, Mottled, Silty - Sand, (SM), Mica, Moderatly Hard, Slightly Moist
		SM		Sand; Tan - Light Tan, Silty - Fine - Medium Grain Sand, (SM), Mica, Moderatly Hard, Slightly Moist
		SM		Sand; White - Tan, Silty - Fine - Medium Grain Sand, Few Coarse grains, (SM), Mica, Moderatly Hard, Slightly Moist
35		SM		Sand, White - Pink some Orange layers, Mottled, Silty - Sand, (SM), Moderatly Hard, Slightly Moist
		SM		Sand; Tan - Pink with some Orange Layers, Mottled, Silty - Sand, (SM), Moderatly Hard, Moist to Wet
				Total Depth (TD) 38.0'
40				

ATTACHMENT C

SOIL PILE PID TABLES

ATTACHMENT D

SOIL PILE PHOTOGRAPHS



Figure 1). DBA PILE- 1(5'-10'), 2(10'-15'), 3(15'-20')



Figure 2). PBDA PILE- 1(5'-10'), 2(15'-20'), 3(25'- 30'), 4(30'-35'), 5(35'-40')



Figure 3). DOA PILE- 1(10'-15'), 2(20'-25'), 3(25'-30'), 4(Clay)

ATTACHMENT E

SOIL LABORATORY ANALYTICAL RESULTS



Report of Analysis

O & M, Inc.
450 Montbrook Lane
Knoxville, TN 37919
Attention: Christopher Fuerst

Project Name: 276 Edgefield FPE

Project Number: 276

Lot Number: **XG20060**

Date Completed: 08/04/2022

08/07/2022 11:50 PM

Approved and released by:
Project Manager II: **Cathy S. Dover**



The electronic signature above is the equivalent of a handwritten signature.
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PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative O & M, Inc. Lot Number: XG20060

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. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18.

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

VOA 8260D

Insufficient sample volume was provided to perform matrix spike/matrix spike duplicate (MS/MSD) for analytical batch 49594. An LCS/LCSD was run in lieu of an MS/MSD. Associated samples: XG20060-005 (DBA-22-D19) and XG20060-018 (DOA-22-F29)

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 49712 exceeded acceptance criteria for the following analytes: Tetrachloroethene (134%). This analyte was biased high and were not detected in the associated samples: XG20060-001, XG20060-007, XG20060-008, XG20060-009, XG20060-010, and XG20060-011.

XG20060-001 (DBA-22-A08) (Run 1) (Analysis Batch 49712)
XG20060-007 (PBDA-22-B13) (Run 1) (Analysis Batch 49712)
XG20060-008 (PBDA-22-D14) (Run 1) (Analysis Batch 49712)
XG20060-009 (PBDA-22-C17) (Run 1) (Analysis Batch 49712)
XG20060-010 (PBDA-22-C19) (Run 1) (Analysis Batch 49712)
XG20060-011 (PBDA-22-D22) (Run 1) (Analysis Batch 49712)

Surrogate recovery for the following samples was outside of acceptance limits: XG20060-001, XG20060-008, XG20060-009, XG20060-010, and XG20060-011. These samples were analyzed at a high dilution; therefore, re-analysis was not performed.

PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

XG20060-001 (DBA-22-A08) (Run 1) (Analysis Batch 49712)
XG20060-008 (PBDA-22-D14) (Run 1) (Analysis Batch 49712)
XG20060-009 (PBDA-22-C17) (Run 1) (Analysis Batch 49712)
XG20060-010 (PBDA-22-C19) (Run 1) (Analysis Batch 49712)
XG20060-011 (PBDA-22-D22) (Run 1) (Analysis Batch 49712)

Tetrachloroethene was reported as an estimated value in sample XG20060-005 (DBA-22-D19) as the result was above the upper calibration level. The sample was re-analyzed from the medium level (methanol) vial, but was not reported due to the result being below the LOQ; therefore, only the low level was reported.

The laboratory control sample (LCS) for analytical batch 49713 exceeded acceptance criteria for the following analytes: Tetrachloroethene (133%>. This analyte was marginally biased high and was not detected in the associated samples: XG20060-012 (PBDA-22-E26), XG20060-013 (PBDA-22-F31), and XG20060-014 (PBDA-22-G36).

Surrogate recovery for the following samples was outside of acceptance limits: XG20060-012 (PBDA-22-E26), XG20060-013 (PBDA-22-F31), and XG20060-014 (PBDA-22-G36). This sample was diluted outside of calibration range; therefore, re-analysis was not performed.

Trichloroethene was reported as an estimated value in samples XG20060-002 (DBA-22-A10), XG20060-004 (DBA-22-C16), XG20060-015 (DOA-22-C12) and XG20060-018 (DOA-22-F29) as the result was above the upper calibration level. The sample was re-analyzed from the medium level (methanol) vial, but was not reported due to the result being below the LOQ; therefore, only the low level was reported.

The Toluene-d8 surrogate recovery for sample XG20060-018 (DOA-22-F29) was outside of acceptance limits @ 140%. Only tetrachloroethene is being reported as an estimated value due to the diluted result being below the LOQ in the Run 3.

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

PACE ANALYTICAL SERVICES, LLC

Sample Summary

O & M, Inc.

Lot Number: XG20060

Project Name: 276 Edgefield FPE

Project Number: 276

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DBA-22-A08	Solid	07/20/2022 1035	07/20/2022
002	DBA-22-A10	Solid	07/20/2022 1030	07/20/2022
003	DBA-22-B13	Solid	07/20/2022 1040	07/20/2022
004	DBA-22-C16	Solid	07/20/2022 1050	07/20/2022
005	DBA-22-D19	Solid	07/20/2022 1120	07/20/2022
006	PBDA-22-A09	Solid	07/20/2022 1205	07/20/2022
007	PBDA-22-B13	Solid	07/20/2022 1215	07/20/2022
008	PBDA-22-D14	Solid	07/20/2022 1220	07/20/2022
009	PBDA-22-C17	Solid	07/20/2022 1225	07/20/2022
010	PBDA-22-C19	Solid	07/20/2022 1235	07/20/2022
011	PBDA-22-D22	Solid	07/20/2022 1245	07/20/2022
012	PBDA-22-E26	Solid	07/20/2022 1300	07/20/2022
013	PBDA-22-F31	Solid	07/20/2022 1310	07/20/2022
014	PBDA-22-G36	Solid	07/20/2022 1320	07/20/2022
015	DOA-22-C12	Solid	07/20/2022 1350	07/20/2022
016	DOA-22-D19	Solid	07/20/2022 1400	07/20/2022
017	DOA-22-E22	Solid	07/20/2022 1410	07/20/2022
018	DOA-22-F29	Solid	07/20/2022 1415	07/20/2022

(18 samples)

PACE ANALYTICAL SERVICES, LLC

Detection Summary

O & M, Inc.

Lot Number: XG20060

Project Name: 276 Edgefield FPE

Project Number: 276

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DBA-22-A08	Solid	TOC	Walkley-Black	2000		mg/kg	7
001	DBA-22-A08	Solid	Trichloroethene	8260D	28000	Q	ug/kg	8
002	DBA-22-A10	Solid	TOC	Walkley-Black	240		mg/kg	9
002	DBA-22-A10	Solid	Trichloroethene	8260D	230	E	ug/kg	10
003	DBA-22-B13	Solid	TOC	Walkley-Black	860		mg/kg	11
003	DBA-22-B13	Solid	Tetrachloroethene	8260D	78		ug/kg	12
003	DBA-22-B13	Solid	Trichloroethene	8260D	4900		ug/kg	12
004	DBA-22-C16	Solid	TOC	Walkley-Black	980		mg/kg	13
004	DBA-22-C16	Solid	Tetrachloroethene	8260D	210	E	ug/kg	14
004	DBA-22-C16	Solid	Trichloroethene	8260D	6700		ug/kg	14
005	DBA-22-D19	Solid	TOC	Walkley-Black	2200		mg/kg	15
005	DBA-22-D19	Solid	Tetrachloroethene	8260D	350	E	ug/kg	16
005	DBA-22-D19	Solid	Trichloroethene	8260D	5700		ug/kg	16
006	PBDA-22-A09	Solid	TOC	Walkley-Black	120	J	mg/kg	17
006	PBDA-22-A09	Solid	Trichloroethene	8260D	12000		ug/kg	18
007	PBDA-22-B13	Solid	TOC	Walkley-Black	240		mg/kg	19
007	PBDA-22-B13	Solid	Trichloroethene	8260D	9300		ug/kg	20
008	PBDA-22-D14	Solid	TOC	Walkley-Black	1500		mg/kg	21
008	PBDA-22-D14	Solid	Trichloroethene	8260D	190000	Q	ug/kg	22
009	PBDA-22-C17	Solid	TOC	Walkley-Black	2900		mg/kg	23
009	PBDA-22-C17	Solid	Trichloroethene	8260D	410000	Q	ug/kg	24
010	PBDA-22-C19	Solid	TOC	Walkley-Black	1900		mg/kg	25
010	PBDA-22-C19	Solid	Trichloroethene	8260D	4300000	Q	ug/kg	26
011	PBDA-22-D22	Solid	TOC	Walkley-Black	3800		mg/kg	27
011	PBDA-22-D22	Solid	Trichloroethene	8260D	9500000	Q	ug/kg	28
012	PBDA-22-E26	Solid	TOC	Walkley-Black	2000		mg/kg	29
012	PBDA-22-E26	Solid	Trichloroethene	8260D	1800000	Q	ug/kg	30
013	PBDA-22-F31	Solid	TOC	Walkley-Black	3000		mg/kg	31
013	PBDA-22-F31	Solid	Trichloroethene	8260D	13000000	Q	ug/kg	32
014	PBDA-22-G36	Solid	TOC	Walkley-Black	1800		mg/kg	33
014	PBDA-22-G36	Solid	Trichloroethene	8260D	2900000	Q	ug/kg	34
015	DOA-22-C12	Solid	TOC	Walkley-Black	310		mg/kg	35
015	DOA-22-C12	Solid	Tetrachloroethene	8260D	300	E	ug/kg	36
015	DOA-22-C12	Solid	Trichloroethene	8260D	2900		ug/kg	36
016	DOA-22-D19	Solid	Tetrachloroethene	8260D	60		ug/kg	38
016	DOA-22-D19	Solid	Trichloroethene	8260D	320		ug/kg	38
017	DOA-22-E22	Solid	Tetrachloroethene	8260D	8.3		ug/kg	40
017	DOA-22-E22	Solid	Trichloroethene	8260D	96		ug/kg	40
018	DOA-22-F29	Solid	TOC	Walkley-Black	190	J	mg/kg	41
018	DOA-22-F29	Solid	Tetrachloroethene	8260D	520	EQ	ug/kg	42
018	DOA-22-F29	Solid	Trichloroethene	8260D	2800		ug/kg	42

Detection Summary (Continued)

Lot Number: XG20060

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(41 detections)

Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-001
Description: DBA-22-A08	Matrix: Solid
Date Sampled: 07/20/2022 1035	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 85.1 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1512	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	2000		200	99	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-001
Description: DBA-22-A08	Matrix: Solid
Date Sampled: 07/20/2022 1035	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 85.1 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	10	08/01/2022 1030	JM1		49712	5.40

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	3200	UQ	3200	1300	ug/kg	1
Tetrachloroethene	127-18-4	8260D	3200	UQL	3200	1300	ug/kg	1
Trichloroethene	79-01-6	8260D	28000	Q	3200	1300	ug/kg	1
Vinyl chloride	75-01-4	8260D	3200	UQ	3200	1900	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	147	47-138
1,2-Dichloroethane-d4		105	53-142
Toluene-d8	N	133	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-002
Description: DBA-22-A10	Matrix: Solid
Date Sampled: 07/20/2022 1030	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 87.6 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1526	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	240		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-002	
Description: DBA-22-A10	Matrix: Solid	
Date Sampled: 07/20/2022 1030	Project Name: 276 Edgefield FPE	% Solids: 87.6 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1550	JM1		49513	5.34

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.3	U	5.3	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.3	U	5.3	2.1	ug/kg	1
Trichloroethene	79-01-6	8260D	230	E	5.3	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.3	U	5.3	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	47-138
1,2-Dichloroethane-d4		108	53-142
Toluene-d8		109	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-003	
Description: DBA-22-B13	Matrix: Solid	
Date Sampled: 07/20/2022 1040	Project Name: 276 Edgefield FPE	% Solids: 88.7 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1530	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	860		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-003
Description: DBA-22-B13	Matrix: Solid
Date Sampled: 07/20/2022 1040	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 88.7 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1614	JM1		49513	4.83
2	5035 High	8260D	2	08/01/2022 1807	JM1		49713	4.70

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.8	U	5.8	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	78		5.8	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	4900		660	270	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.8	U	5.8	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		104	47-138		99	47-138
1,2-Dichloroethane-d4		104	53-142		86	53-142
Toluene-d8		111	68-124		109	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-004
Description: DBA-22-C16	Matrix: Solid
Date Sampled: 07/20/2022 1050	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 89.3 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1536	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	980		200	99	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-004	
Description: DBA-22-C16	Matrix: Solid	
Date Sampled: 07/20/2022 1050	Project Name: 276 Edgefield FPE	% Solids: 89.3 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1637	JM1		49513	5.46
2	5035 High	8260D	2	08/01/2022 1830	JM1		49713	5.38

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.1	U	5.1	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	210	E	5.1	2.1	ug/kg	1
Trichloroethene	79-01-6	8260D	6700		580	230	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.1	U	5.1	3.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		107	47-138		99	47-138
1,2-Dichloroethane-d4		105	53-142		82	53-142
Toluene-d8		110	68-124		106	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-005
Description: DBA-22-D19	Matrix: Solid
Date Sampled: 07/20/2022 1120	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 89.6 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1544	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	2200		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-005
Description: DBA-22-D19	Matrix: Solid
Date Sampled: 07/20/2022 1120	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 89.6 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1346	BBW		49594	5.13
2	5035 High	8260D	4	08/01/2022 1053	JM1		49712	4.88

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.4	U	5.4	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260D	350	E	5.4	2.2	ug/kg	1
Trichloroethene	79-01-6	8260D	5700		1300	500	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.4	U	5.4	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		104	47-138		101	47-138
1,2-Dichloroethane-d4		101	53-142		85	53-142
Toluene-d8		109	68-124		107	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-006
Description: PBDA-22-A09	Matrix: Solid
Date Sampled: 07/20/2022 1205	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.8 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1546	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	120	J	200	99	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-006
Description: PBDA-22-A09	Matrix: Solid
Date Sampled: 07/20/2022 1205	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.8 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1701	JM1		49513	5.31
2	5035 High	8260D	4	08/01/2022 1854	JM1		49713	5.32

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.7	U	5.7	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.7	U	5.7	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	12000		1300	540	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.7	U	5.7	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		105	47-138		99	47-138
1,2-Dichloroethane-d4		110	53-142		86	53-142
Toluene-d8		116	68-124		104	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-007	
Description: PBDA-22-B13	Matrix: Solid	
Date Sampled: 07/20/2022 1215	Project Name: 276 Edgefield FPE	% Solids: 88.9 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1549	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	240		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-007
Description: PBDA-22-B13	Matrix: Solid
Date Sampled: 07/20/2022 1215	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 88.9 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	4	08/01/2022 1116	JM1		49712	5.77

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	1100	U	1100	440	ug/kg	1
Tetrachloroethene	127-18-4	8260D	1100	UL	1100	440	ug/kg	1
Trichloroethene	79-01-6	8260D	9300		1100	440	ug/kg	1
Vinyl chloride	75-01-4	8260D	1100	U	1100	660	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		88	53-142
Toluene-d8		111	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-008
Description: PBDA-22-D14	Matrix: Solid
Date Sampled: 07/20/2022 1220	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1552	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	1500		190	97	mg/kg	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-008
Description: PBDA-22-D14	Matrix: Solid
Date Sampled: 07/20/2022 1220	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	20	08/01/2022 1139	JM1		49712	5.05

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	7100	UQ	7100	2800	ug/kg	1
Tetrachloroethene	127-18-4	8260D	7100	UQL	7100	2800	ug/kg	1
Trichloroethene	79-01-6	8260D	190000	Q	7100	2800	ug/kg	1
Vinyl chloride	75-01-4	8260D	7100	UQ	7100	4200	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	151	47-138
1,2-Dichloroethane-d4		108	53-142
Toluene-d8	N	136	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-009
Description: PBDA-22-C17	Matrix: Solid
Date Sampled: 07/20/2022 1225	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 84.5 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1736	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	2900		200	99	mg/kg	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.		Laboratory ID: XG20060-009
Description: PBDA-22-C17		Matrix: Solid
Date Sampled: 07/20/2022 1225	Project Name: 276 Edgefield FPE	% Solids: 84.5 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	200	08/01/2022 1203	JM1		49712	5.15

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	67000	UQ	67000	27000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	67000	UQL	67000	27000	ug/kg	1
Trichloroethene	79-01-6	8260D	410000	Q	67000	27000	ug/kg	1
Vinyl chloride	75-01-4	8260D	67000	UQ	67000	40000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	407	47-138
1,2-Dichloroethane-d4		55	53-142
Toluene-d8	N	216	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Inorganic non-metals

Client: O & M, Inc.		Laboratory ID: XG20060-010
Description: PBDA-22-C19		Matrix: Solid
Date Sampled: 07/20/2022 1235	Project Name: 276 Edgefield FPE	% Solids: 88.8 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1751	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	1900		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-010	
Description: PBDA-22-C19	Matrix: Solid	
Date Sampled: 07/20/2022 1235	Project Name: 276 Edgefield FPE	% Solids: 88.8 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	1000	08/01/2022 1226	JM1		49712	5.63

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	280000	UQ	280000	110000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	280000	UQL	280000	110000	ug/kg	1
Trichloroethene	79-01-6	8260D	4300000	Q	280000	110000	ug/kg	1
Vinyl chloride	75-01-4	8260D	280000	UQ	280000	170000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	972	47-138
1,2-Dichloroethane-d4	N	0.00	53-142
Toluene-d8	N	587	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-011
Description: PBDA-22-D22	Matrix: Solid
Date Sampled: 07/20/2022 1245	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 86.5 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1756	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	3800		200	99	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-011
Description: PBDA-22-D22	Matrix: Solid
Date Sampled: 07/20/2022 1245	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 86.5 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	2000	08/01/2022 1249	JM1		49712	5.83

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	570000	UQ	570000	230000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	570000	UQL	570000	230000	ug/kg	1
Trichloroethene	79-01-6	8260D	9500000	Q	570000	230000	ug/kg	1
Vinyl chloride	75-01-4	8260D	570000	UQ	570000	340000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	2780	47-138
1,2-Dichloroethane-d4	N	0.00	53-142
Toluene-d8	N	1010	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-012
Description: PBDA-22-E26	Matrix: Solid
Date Sampled: 07/20/2022 1300	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 86.7 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1757	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	2000		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.		Laboratory ID: XG20060-012
Description: PBDA-22-E26		Matrix: Solid
Date Sampled: 07/20/2022 1300	Project Name: 276 Edgefield FPE	% Solids: 86.7 07/25/2022 2048
Date Received: 07/20/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	400	08/01/2022 1611	JM1		49713	6.24

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	110000	UQ	110000	43000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	110000	UQL	110000	43000	ug/kg	1
Trichloroethene	79-01-6	8260D	1800000	Q	110000	43000	ug/kg	1
Vinyl chloride	75-01-4	8260D	110000	UQ	110000	65000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	1470	47-138
1,2-Dichloroethane-d4	N	808	53-142
Toluene-d8	N	1250	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-013
Description: PBDA-22-F31	Matrix: Solid
Date Sampled: 07/20/2022 1310	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 85.5 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	07/28/2022 1800	DMA		49099

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	3000		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-013
Description: PBDA-22-F31	Matrix: Solid
Date Sampled: 07/20/2022 1310	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 85.5 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	2000	08/01/2022 1634	JM1		49713	5.94

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	580000	UQ	580000	230000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	580000	UQL	580000	230000	ug/kg	1
Trichloroethene	79-01-6	8260D	13000000	Q	580000	230000	ug/kg	1
Vinyl chloride	75-01-4	8260D	580000	UQ	580000	350000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	3330	47-138
1,2-Dichloroethane-d4	N	0.00	53-142
Toluene-d8	N	1130	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-014
Description: PBDA-22-G36	Matrix: Solid
Date Sampled: 07/20/2022 1320	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 84.8 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	08/02/2022 1822	DMA		49583

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	1800		200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-014	Matrix: Solid
Description: PBDA-22-G36	Project Name: 276 Edgefield FPE	% Solids: 84.8 07/25/2022 2048
Date Sampled: 07/20/2022 1320	Project Number: 276	
Date Received: 07/20/2022		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	400	08/01/2022 1657	JM1		49713	4.91

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	140000	UQ	140000	55000	ug/kg	1
Tetrachloroethene	127-18-4	8260D	140000	UQL	140000	55000	ug/kg	1
Trichloroethene	79-01-6	8260D	2900000	Q	140000	55000	ug/kg	1
Vinyl chloride	75-01-4	8260D	140000	UQ	140000	83000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	512	47-138
1,2-Dichloroethane-d4	N	0.00	53-142
Toluene-d8	N	318	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-015
Description: DOA-22-C12	Matrix: Solid
Date Sampled: 07/20/2022 1350	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 76.2 07/28/2022 2248

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	08/02/2022 1822	DMA		49583

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	310		200	98	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-015
Description: DOA-22-C12	Matrix: Solid
Date Sampled: 07/20/2022 1350	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 76.2 07/28/2022 2248

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1725	JM1		49513	5.81
2	5035 High	8260D	1	08/01/2022 1917	JM1		49713	5.71

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.6	U	5.6	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	300	E	5.6	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	2900		370	150	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.6	U	5.6	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		101	47-138		93	47-138
1,2-Dichloroethane-d4		111	53-142		77	53-142
Toluene-d8		108	68-124		102	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-016
Description: DOA-22-D19	Matrix: Solid
Date Sampled: 07/20/2022 1400	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 86.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	08/02/2022 1822	DMA		49583

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	200	U	200	98	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-016
Description: DOA-22-D19	Matrix: Solid
Date Sampled: 07/20/2022 1400	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 86.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1750	JM1		49513	5.63
2	5035 High	8260D	1	08/01/2022 1940	JM1		49713	5.56

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.1	U	5.1	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	60		5.1	2.1	ug/kg	1
Trichloroethene	79-01-6	8260D	320		300	120	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.1	U	5.1	3.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138		95	47-138
1,2-Dichloroethane-d4		109	53-142		83	53-142
Toluene-d8		111	68-124		104	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-017
Description: DOA-22-E22	Matrix: Solid
Date Sampled: 07/20/2022 1410	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	08/02/2022 1822	DMA		49583

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	200	U	200	99	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-017
Description: DOA-22-E22	Matrix: Solid
Date Sampled: 07/20/2022 1410	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 82.4 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1814	JM1		49513	5.75
2	5035	8260D	1	08/03/2022 1152	JM1		49943	5.73

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.3	U	5.3	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	8.3		5.3	2.1	ug/kg	2
Trichloroethene	79-01-6	8260D	96		5.3	2.1	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.3	U	5.3	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		104	47-138		99	47-138
1,2-Dichloroethane-d4		103	53-142		97	53-142
Toluene-d8		113	68-124		104	68-124

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

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Inorganic non-metals

Client: O & M, Inc.	Laboratory ID: XG20060-018
Description: DOA-22-F29	Matrix: Solid
Date Sampled: 07/20/2022 1415	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 81.1 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	08/02/2022 1822	DMA		49583

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
TOC		Walkley-Black	190	J	200	100	mg/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG20060-018
Description: DOA-22-F29	Matrix: Solid
Date Sampled: 07/20/2022 1415	Project Name: 276 Edgefield FPE
Date Received: 07/20/2022	Project Number: 276
	% Solids: 81.1 07/25/2022 2048

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1410	BBW		49594	6.25
3	5035 High	8260D	1	08/03/2022 1441	JM1		49904	5.90

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	320	U	320	130	ug/kg	3
Tetrachloroethene	127-18-4	8260D	520	EQ	4.9	2.0	ug/kg	1
Trichloroethene	79-01-6	8260D	2800		320	130	ug/kg	3
Vinyl chloride	75-01-4	8260D	320	U	320	190	ug/kg	3

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
Bromofluorobenzene		126	47-138		89	47-138
1,2-Dichloroethane-d4		123	53-142		86	53-142
Toluene-d8	N	140	68-124		88	68-124

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

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QC Summary

Inorganic non-metals - MB

Sample ID: XQ49099-001

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
TOC	200	U	1	200	100	mg/kg	07/28/2022 1435

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - LCS

Sample ID: XQ49099-002

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	1000	1200		1	120	80-120	07/28/2022 1436

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MS

Sample ID: XG20060-001MS

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	2000	1000	3100		1	115	70-130	07/28/2022 1515

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MSD

Sample ID: XG20060-001MD

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TOC	2000	1000	2900		1	100	5.1	70-130	20	07/28/2022 1517

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MS

Sample ID: XG20060-004MS

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	980	1000	2200		1	123	70-130	07/28/2022 1539

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MSD

Sample ID: XG20060-004MD

Matrix: Solid

Batch: 49099

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TOC	980	1000	2100		1	115	3.8	70-130	20	07/28/2022 1541

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MB

Sample ID: XQ49583-001

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
TOC	200	U	1	200	100	mg/kg	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - LCS

Sample ID: XQ49583-002

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	1000	1200		1	117	80-120	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MS

Sample ID: XG20060-014MS

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	1800	1000	2700		1	96	70-130	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MSD

Sample ID: XG20060-014MD

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TOC	1800	990	2700		1	99	0.55	70-130	20	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MS

Sample ID: XG20060-016MS

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TOC	0.0	1000	1200		1	121	70-130	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Inorganic non-metals - MSD

Sample ID: XG20060-016MD

Matrix: Solid

Batch: 49583

Analytical Method: Walkley-Black

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TOC	0.0	1000	1200		1	125	2.9	70-130	20	08/02/2022 1822

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49513-001

Matrix: Solid

Batch: 49513

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	07/29/2022 1035
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	47-138				
1,2-Dichloroethane-d4		98	53-142				
Toluene-d8		105	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49513-002

Matrix: Solid

Batch: 49513

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	46		1	93	70-130	07/29/2022 0942
Tetrachloroethene	50	44		1	88	70-130	07/29/2022 0942
Trichloroethene	50	44		1	88	70-130	07/29/2022 0942
Vinyl chloride	50	46		1	91	70-130	07/29/2022 0942
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		92	47-138				
1,2-Dichloroethane-d4		93	53-142				
Toluene-d8		89	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49594-001

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	07/30/2022 1227
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	07/30/2022 1227
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	07/30/2022 1227
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	47-138				
1,2-Dichloroethane-d4		100	53-142				
Toluene-d8		103	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49594-002

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	42		1	84	70-130	07/30/2022 1140
Tetrachloroethene	50	47		1	94	70-130	07/30/2022 1140
Vinyl chloride	50	48		1	95	70-130	07/30/2022 1140
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	47-138				
1,2-Dichloroethane-d4		89	53-142				
Toluene-d8		92	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: XQ49594-003

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
1,2-Dichloroethane	50	44		1	88	4.6	70-130	20	07/30/2022 1203
Tetrachloroethene	50	44		1	88	6.6	70-130	20	07/30/2022 1203
Vinyl chloride	50	45		1	89	6.4	70-130	20	07/30/2022 1203
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		88	47-138						
1,2-Dichloroethane-d4		91	53-142						
Toluene-d8		89	68-124						

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49712-001

Matrix: Solid

Batch: 49712

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	250	U	1	250	100	ug/kg	07/27/2022 1630
Tetrachloroethene	250	U	1	250	100	ug/kg	07/27/2022 1630
Trichloroethene	250	U	1	250	100	ug/kg	07/27/2022 1630
Vinyl chloride	250	U	1	250	150	ug/kg	07/27/2022 1630
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		93	47-138				
1,2-Dichloroethane-d4		83	53-142				
Toluene-d8		103	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49712-002

Matrix: Solid

Batch: 49712

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	2500	2300		1	93	70-130	07/27/2022 1607
Tetrachloroethene	2500	3400	N	1	134	70-130	07/27/2022 1607
Trichloroethene	2500	2900		1	117	70-130	07/27/2022 1607
Vinyl chloride	2500	2500		1	98	70-130	07/27/2022 1607
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		94	47-138				
1,2-Dichloroethane-d4		85	53-142				
Toluene-d8		110	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49713-001

Matrix: Solid

Batch: 49713

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	250	U	1	250	100	ug/kg	08/01/2022 1336
Tetrachloroethene	250	U	1	250	100	ug/kg	08/01/2022 1336
Trichloroethene	250	U	1	250	100	ug/kg	08/01/2022 1336
Vinyl chloride	250	U	1	250	150	ug/kg	08/01/2022 1336
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		90	47-138				
1,2-Dichloroethane-d4		78	53-142				
Toluene-d8		98	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49713-002

Matrix: Solid

Batch: 49713

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	2500	2300		1	93	70-130	08/01/2022 1312
Tetrachloroethene	2500	3300	N	1	133	70-130	08/01/2022 1312
Trichloroethene	2500	2900		1	114	70-130	08/01/2022 1312
Vinyl chloride	2500	2900		1	115	70-130	08/01/2022 1312
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	47-138				
1,2-Dichloroethane-d4		85	53-142				
Toluene-d8		112	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49904-001

Matrix: Solid

Batch: 49904

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	250	U	1	250	100	ug/kg	08/01/2022 1336
Trichloroethene	250	U	1	250	100	ug/kg	08/01/2022 1336
Vinyl chloride	250	U	1	250	150	ug/kg	08/01/2022 1336
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene	90		47-138				
1,2-Dichloroethane-d4	78		53-142				
Toluene-d8	98		68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49904-002

Matrix: Solid

Batch: 49904

Prep Method: 5035 High

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	2500	2300		1	93	70-130	08/01/2022 1312
Trichloroethene	2500	2900		1	114	70-130	08/01/2022 1312
Vinyl chloride	2500	2900		1	115	70-130	08/01/2022 1312
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			47-138		
1,2-Dichloroethane-d4		85			53-142		
Toluene-d8		112			68-124		

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49943-001

Matrix: Solid

Batch: 49943

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	08/03/2022 1013
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	08/03/2022 1013
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	47-138				
1,2-Dichloroethane-d4		98	53-142				
Toluene-d8		109	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49943-002

Matrix: Solid

Batch: 49943

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	49		1	97	70-130	08/03/2022 0948
Trichloroethene	50	48		1	96	70-130	08/03/2022 0948
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		100	47-138				
1,2-Dichloroethane-d4		99	53-142				
Toluene-d8		102	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Number 137769

Client OAM inc.		Report to Contact Chris Finest		Telephone No. / E-mail 803 293-2916	Quote No.
Address 450 IMBATIONGATE LN		Sampler's Signature <i>Chris Finest</i>		Analysts (Allow for more spaces if needed)	
City KNOXVILLE		Printed Name Chris Finest		Page 1 of 1	
State TN		Zip Code 37914		Barcode XG20060	
Project Name FPE Edgelyield, SC		P.O. No. 276		CSO XG20060	
Project No. 276		Collection Date(s)		Remarks / Cooler I.D.	
Sample ID / Description (Containers for each sample may be combined on one line.)		Collection Time (Military)			
Matrix		No. of Containers by Fractionation Type			
ASBESTOS		ASBESTOS			
LEAD		LEAD			
COPPER		COPPER			
ZINC		ZINC			
MERCURY		MERCURY			
CADMIUM		CADMIUM			
CHROMIUM		CHROMIUM			
MANGANESE		MANGANESE			
NICKEL		NICKEL			
SILICA		SILICA			
TOC		TOC			
PBD A-22-D22		07/20/2022 12:45			
TSD A-22-E26		07/20/2022 13:00			
PBD A-22-F31		07/20/2022 13:10			
PBD A-22-G36		07/20/2022 13:20			
DOA-22-C12		07/20/2022 13:50			
DOA-22-D14		07/20/2022 14:00			
DOA-22-E22		07/20/2022 14:10			
DOA-22-F29		07/20/2022 14:15			

Turn Around Time Required (Prior lab approval required for expedited TAT)		Sample Disposal		Possible Hazard Identification		CIC Requirements (Specify)	
<input type="checkbox"/> Standard	<input type="checkbox"/> Rush (Specify)	<input type="checkbox"/> Return to Client	<input type="checkbox"/> Dispose by Lab	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison
1. Retransmitted by <i>Christopher J Finest</i>		Date		1. Received by		Date	
2. Retransmitted by		Time		2. Received by		Time	
3. Retransmitted by		Date		3. Received by		Date	
4. Retransmitted by		Time		4. Laboratory received by		Time	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		Date		LAB USE ONLY		Temp Blank	
		Time		Received on the (Circle) (Yes)		Temp Blank	
		Date		No		Temp Blank	
		Time		Yes		Temp Blank	
		Date		Receptor Temp		Temp Blank	
		Time		4.8		Temp Blank	

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

Document Number: MEG0002-01



Report of Analysis

O & M, Inc.
450 Montbrook Lane
Knoxville, TN 37919
Attention: Christopher Fuerst

Project Name: 276 Edgefield FPE

Project Number: 276

Lot Number: **XG22006**

Date Completed: 08/04/2022

08/08/2022 12:24 AM

Approved and released by:
Project Manager II: **Cathy S. Dover**



The electronic signature above is the equivalent of a handwritten signature.
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PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative O & M, Inc. Lot Number: XG22006

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. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18.

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

VOA 8260D

Insufficient sample volume was provided to perform matrix spike/matrix spike duplicate (MS/MSD) for analytical batch 49594. An LCS/LCSD was run in lieu of an MS/MSD. Associated samples noted below:

XG22006-004 (PBDA22 (5-10)) (Run 1) (Analysis Batch 49594)
XG22006-005 (PBDA22 (15-20)) (Run 1) (Analysis Batch 49594)
XG22006-006 (PBDA22 (25-30)) (Run 1) (Analysis Batch 49594)
XG22006-007 (PBDA22 (30-35)) (Run 1) (Analysis Batch 49594)
XG22006-008 (PBDA22 (35-40)) (Run 1) (Analysis Batch 49594)
XG22006-009 (DOA22 (10-15)) (Run 1) (Analysis Batch 49594)
XG22006-010 (DOA22 (20-25)) (Run 1) (Analysis Batch 49594)
XG22006-011 (DOA22 (25-30)) (Run 1) (Analysis Batch 49594)
XG22006-012 (DOA22 (clay)) (Run 1) (Analysis Batch 49594)

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

PACE ANALYTICAL SERVICES, LLC

Sample Summary

O & M, Inc.

Lot Number: XG22006

Project Name: 276 Edgefield FPE

Project Number: 276

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DBA22 (5-10)	Solid	07/22/2022 0700	07/22/2022
002	DBA22 (10-15)	Solid	07/22/2022 0710	07/22/2022
003	DBA22 (15-20)	Solid	07/22/2022 0720	07/22/2022
004	PBDA22 (5-10)	Solid	07/22/2022 0730	07/22/2022
005	PBDA22 (15-20)	Solid	07/22/2022 0740	07/22/2022
006	PBDA22 (25-30)	Solid	07/22/2022 0750	07/22/2022
007	PBDA22 (30-35)	Solid	07/22/2022 0800	07/22/2022
008	PBDA22 (35-40)	Solid	07/22/2022 0810	07/22/2022
009	DOA22 (10-15)	Solid	07/22/2022 0820	07/22/2022
010	DOA22 (20-25)	Solid	07/22/2022 0830	07/22/2022
011	DOA22 (25-30)	Solid	07/22/2022 0840	07/22/2022
012	DOA22 (clay)	Solid	07/22/2022 0850	07/22/2022

(12 samples)

PACE ANALYTICAL SERVICES, LLC

Detection Summary

O & M, Inc.

Lot Number: XG22006

Project Name: 276 Edgefield FPE

Project Number: 276

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	PBDA22 (15-20)	Solid	Trichloroethene	8260D	3.1	J	ug/kg	9
006	PBDA22 (25-30)	Solid	Trichloroethene	8260D	17		ug/kg	10
008	PBDA22 (35-40)	Solid	Trichloroethene	8260D	2.5	J	ug/kg	12

(3 detections)

Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-001	
Description: DBA22 (5-10)	Matrix: Solid	
Date Sampled: 07/22/2022 0700	Project Name: 276 Edgefield FPE	% Solids: 97.1 07/27/2022 2147
Date Received: 07/22/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1838	JM1		49513	3.72
2	5035	8260D	1	08/03/2022 1217	JM1		49943	3.65

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.9	U	6.9	2.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.9	U	6.9	2.8	ug/kg	1
Trichloroethene	79-01-6	8260D	7.1	U	7.1	2.8	ug/kg	2
Vinyl chloride	75-01-4	8260D	6.9	U	6.9	4.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138		101	47-138
1,2-Dichloroethane-d4		110	53-142		102	53-142
Toluene-d8		109	68-124		108	68-124

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

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

Client: O & M, Inc.	Laboratory ID: XG22006-002
Description: DBA22 (10-15)	Matrix: Solid
Date Sampled: 07/22/2022 0710	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.4 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1902	JM1		49513	4.89

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.2	U	5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.2	U	5.2	2.1	ug/kg	1
Trichloroethene	79-01-6	8260D	5.2	U	5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.2	U	5.2	3.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		110	53-142
Toluene-d8		109	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-003
Description: DBA22 (15-20)	Matrix: Solid
Date Sampled: 07/22/2022 0720	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.9 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/29/2022 1926	JM1		49513	4.41

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.7	U	5.7	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.7	U	5.7	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	5.7	U	5.7	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.7	U	5.7	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		109	53-142
Toluene-d8		108	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-004
Description: PBDA22 (5-10)	Matrix: Solid
Date Sampled: 07/22/2022 0730	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.6 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260D	1	08/03/2022 1241	JM1		49943	4.49

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.6	U	5.6	2.3	ug/kg	2
Tetrachloroethene	127-18-4	8260D	5.6	U	5.6	2.3	ug/kg	2
Trichloroethene	79-01-6	8260D	5.6	U	5.6	2.3	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.6	U	5.6	3.4	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		104	47-138
1,2-Dichloroethane-d4		107	53-142
Toluene-d8		110	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-005
Description: PBDA22 (15-20)	Matrix: Solid
Date Sampled: 07/22/2022 0740	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.2 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1457	BBW		49594	3.92
2	5035	8260D	1	08/03/2022 1305	JM1		49943	3.92

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.5	U	6.5	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.5	U	6.5	2.6	ug/kg	1
Trichloroethene	79-01-6	8260D	3.1	J	6.5	2.6	ug/kg	2
Vinyl chloride	75-01-4	8260D	6.5	U	6.5	3.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		81	47-138		100	47-138
1,2-Dichloroethane-d4		85	53-142		106	53-142
Toluene-d8		91	68-124		109	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-006
Description: PBDA22 (25-30)	Matrix: Solid
Date Sampled: 07/22/2022 0750	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.2 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1521	BBW		49594	4.30
2	5035	8260D	1	08/03/2022 1329	JM1		49943	3.81

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.9	U	5.9	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.9	U	5.9	2.4	ug/kg	1
Trichloroethene	79-01-6	8260D	17		6.7	2.7	ug/kg	2
Vinyl chloride	75-01-4	8260D	5.9	U	5.9	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		87	47-138		99	47-138
1,2-Dichloroethane-d4		91	53-142		106	53-142
Toluene-d8		95	68-124		107	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-007
Description: PBDA22 (30-35)	Matrix: Solid
Date Sampled: 07/22/2022 0800	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.7 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1545	BBW		49594	4.16

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.1	U	6.1	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.1	U	6.1	2.4	ug/kg	1
Trichloroethene	79-01-6	8260D	6.1	U	6.1	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.1	U	6.1	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	47-138
1,2-Dichloroethane-d4		92	53-142
Toluene-d8		95	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-008
Description: PBDA22 (35-40)	Matrix: Solid
Date Sampled: 07/22/2022 0810	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.4 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1608	BBW		49594	4.05

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.3	U	6.3	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.3	U	6.3	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	2.5	J	6.3	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.3	U	6.3	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		82	47-138
1,2-Dichloroethane-d4		89	53-142
Toluene-d8		90	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-009
Description: DOA22 (10-15)	Matrix: Solid
Date Sampled: 07/22/2022 0820	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 96.0 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1632	BBW		49594	3.65

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	7.1	U	7.1	2.9	ug/kg	1
Tetrachloroethene	127-18-4	8260D	7.1	U	7.1	2.9	ug/kg	1
Trichloroethene	79-01-6	8260D	7.1	U	7.1	2.9	ug/kg	1
Vinyl chloride	75-01-4	8260D	7.1	U	7.1	4.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		76	47-138
1,2-Dichloroethane-d4		79	53-142
Toluene-d8		83	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-010
Description: DOA22 (20-25)	Matrix: Solid
Date Sampled: 07/22/2022 0830	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 97.9 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1656	BBW		49594	4.03

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.3	U	6.3	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.3	U	6.3	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	6.3	U	6.3	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.3	U	6.3	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	47-138
1,2-Dichloroethane-d4		89	53-142
Toluene-d8		89	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-011
Description: DOA22 (25-30)	Matrix: Solid
Date Sampled: 07/22/2022 0840	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 98.3 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1720	BBW		49594	3.49

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	7.3	U	7.3	2.9	ug/kg	1
Tetrachloroethene	127-18-4	8260D	7.3	U	7.3	2.9	ug/kg	1
Trichloroethene	79-01-6	8260D	7.3	U	7.3	2.9	ug/kg	1
Vinyl chloride	75-01-4	8260D	7.3	U	7.3	4.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		74	47-138
1,2-Dichloroethane-d4		76	53-142
Toluene-d8		80	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit Q = Surrogate failure
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL L = LCS/LCSD failure
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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG22006-012
Description: DOA22 (clay)	Matrix: Solid
Date Sampled: 07/22/2022 0850	Project Name: 276 Edgefield FPE
Date Received: 07/22/2022	Project Number: 276
	% Solids: 97.1 07/27/2022 2147

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	07/30/2022 1744	BBW		49594	3.66

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	7.0	U	7.0	2.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	7.0	U	7.0	2.8	ug/kg	1
Trichloroethene	79-01-6	8260D	7.0	U	7.0	2.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	7.0	U	7.0	4.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		77	47-138
1,2-Dichloroethane-d4		81	53-142
Toluene-d8		86	68-124

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

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QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49513-001

Matrix: Solid

Batch: 49513

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	07/29/2022 1035
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	07/29/2022 1035
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	47-138				
1,2-Dichloroethane-d4		98	53-142				
Toluene-d8		105	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49513-002

Matrix: Solid

Batch: 49513

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	46		1	93	70-130	07/29/2022 0942
Tetrachloroethene	50	44		1	88	70-130	07/29/2022 0942
Trichloroethene	50	44		1	88	70-130	07/29/2022 0942
Vinyl chloride	50	46		1	91	70-130	07/29/2022 0942
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		92			47-138		
1,2-Dichloroethane-d4		93			53-142		
Toluene-d8		89			68-124		

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49594-001

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	07/30/2022 1227
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	07/30/2022 1227
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	07/30/2022 1227
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	07/30/2022 1227
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	47-138				
1,2-Dichloroethane-d4		100	53-142				
Toluene-d8		103	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49594-002

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	42		1	84	70-130	07/30/2022 1140
Tetrachloroethene	50	47		1	94	70-130	07/30/2022 1140
Trichloroethene	50	45		1	91	70-130	07/30/2022 1140
Vinyl chloride	50	48		1	95	70-130	07/30/2022 1140
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		95			47-138		
1,2-Dichloroethane-d4		89			53-142		
Toluene-d8		92			68-124		

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: XQ49594-003

Matrix: Solid

Batch: 49594

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
1,2-Dichloroethane	50	44		1	88	4.6	70-130	20	07/30/2022 1203
Tetrachloroethene	50	44		1	88	6.6	70-130	20	07/30/2022 1203
Trichloroethene	50	44		1	88	3.0	70-130	20	07/30/2022 1203
Vinyl chloride	50	45		1	89	6.4	70-130	20	07/30/2022 1203
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		88	47-138						
1,2-Dichloroethane-d4		91	53-142						
Toluene-d8		89	68-124						

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ49943-001

Matrix: Solid

Batch: 49943

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	08/03/2022 1013
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	08/03/2022 1013
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	08/03/2022 1013
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	08/03/2022 1013
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	47-138				
1,2-Dichloroethane-d4		98	53-142				
Toluene-d8		109	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ49943-002

Matrix: Solid

Batch: 49943

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	47		1	94	70-130	08/03/2022 0948
Tetrachloroethene	50	49		1	97	70-130	08/03/2022 0948
Trichloroethene	50	48		1	96	70-130	08/03/2022 0948
Vinyl chloride	50	55		1	110	70-130	08/03/2022 0948
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		100			47-138		
1,2-Dichloroethane-d4		99			53-142		
Toluene-d8		102			68-124		

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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



Samples Receipt Checklist (SRC) (ME0018C-15)

Issuing Authority: Pace ENV - WCOL

Revised: 9/29/2020

Page 1 of 1

Sample Receipt Checklist (SRC)

Client: O&M

Cooler Inspected by/date: KNR / 07/22/2022

Lot #: XG22006

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>15.3 / 15.3</u> °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>6</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH ₃ /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: H₂SO₄, HNO₃, 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 (Na₂S₂O₃) with Shealy ID: NA

SR barcode labels applied by: TEC Date: 07/22/2022

Comments:



Report of Analysis

O & M, Inc.
450 Montbrook Lane
Knoxville, TN 37919
Attention: Christopher Fuerst

Project Name: FPE Edgefield
Project Number: 276
Lot Number: **XG28016**
Date Completed: 08/12/2022

08/16/2022 8:40 PM
Approved and released by:
Project Manager II: **Cathy S. Dover**



The electronic signature above is the equivalent of a handwritten signature.
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PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative O & M, Inc. Lot Number: XG28016

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. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18.

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

VOA 8260D

Insufficient sample volume was provided to perform matrix spike/matrix spike duplicate (MS/MSD) for analytical batch 50085. An LCS/LCSD was run in lieu of an MS/MSD. Associated samples:

XG28016-001 (DBA22 (5-10)) (Run 1) (Analysis Batch 50085)
XG28016-002 (DBA22 (10-15)) (Run 1) (Analysis Batch 50085)
XG28016-003 (DBA22 (15-20)) (Run 1) (Analysis Batch 50085)
XG28016-004 (PBDA22 (5-10)) (Run 1) (Analysis Batch 50085)
XG28016-005 (PBDA22 (15-20)) (Run 1) (Analysis Batch 50085)
XG28016-006 (PBDA22 (25-30)) (Run 1) (Analysis Batch 50085)
XG28016-007 (PBDA22 (30-35)) (Run 1) (Analysis Batch 50085)

Insufficient sample volume was provided to perform matrix spike/matrix spike duplicate (MS/MSD) for analytical batch 50239. An LCS/LCSD was run in lieu of an MS/MSD. Associated samples:

XG28016-008 (PBDA22 (35-40)) (Run 1) (Analysis Batch 50239)
XG28016-009 (DOA22 (10-15)) (Run 1) (Analysis Batch 50239)
XG28016-010 (DOA22 (20-25)) (Run 1) (Analysis Batch 50239)
XG28016-011 (DOA22 (25-30)) (Run 1) (Analysis Batch 50239)
XG28016-012 (DOA22 (Clay)) (Run 1) (Analysis Batch 50239)

PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

The laboratory control sample laboratory control sample duplicate (LCSD) for analytical batch 50239 exceeded acceptance criteria for the following analytes: Vinyl Chloride (145%). This analyte was biased high and was not detected in the associated samples: XG28016-008, XG28016-009, XG28016-010, XG28016-011, and XG28016-012. Also, the associated LCS passed acceptance criteria.

XG28016-008 (PBDA22 (35-40)) (Run 1) (Analysis Batch 50239)

XG28016-009 (DOA22 (10-15)) (Run 1) (Analysis Batch 50239)

XG28016-010 (DOA22 (20-25)) (Run 1) (Analysis Batch 50239)

XG28016-011 (DOA22 (25-30)) (Run 1) (Analysis Batch 50239)

XG28016-012 (DOA22 (Clay)) (Run 1) (Analysis Batch 50239)

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

PACE ANALYTICAL SERVICES, LLC

Sample Summary

O & M, Inc.

Lot Number: XG28016

Project Name: FPE Edgefield

Project Number: 276

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DBA22 (5-10)	Solid	07/28/2022 1000	07/28/2022
002	DBA22 (10-15)	Solid	07/28/2022 1010	07/28/2022
003	DBA22 (15-20)	Solid	07/28/2022 1020	07/28/2022
004	PBDA22 (5-10)	Solid	07/28/2022 1030	07/28/2022
005	PBDA22 (15-20)	Solid	07/28/2022 1040	07/28/2022
006	PBDA22 (25-30)	Solid	07/28/2022 1050	07/28/2022
007	PBDA22 (30-35)	Solid	07/28/2022 1100	07/28/2022
008	PBDA22 (35-40)	Solid	07/28/2022 1110	07/28/2022
009	DOA22 (10-15)	Solid	07/28/2022 1120	07/28/2022
010	DOA22 (20-25)	Solid	07/28/2022 1130	07/28/2022
011	DOA22 (25-30)	Solid	07/28/2022 1140	07/28/2022
012	DOA22 (Clay)	Solid	07/28/2022 1150	07/28/2022

(12 samples)

PACE ANALYTICAL SERVICES, LLC

Detection Summary

O & M, Inc.

Lot Number: XG28016

Project Name: FPE Edgefield

Project Number: 276

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-001
Description: DBA22 (5-10)	Matrix: Solid
Date Sampled: 07/28/2022 1000	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 98.3 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1602	JM1		50085	3.97

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.4	U	6.4	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.4	U	6.4	2.6	ug/kg	1
Trichloroethene	79-01-6	8260D	6.4	U	6.4	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.4	U	6.4	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		113	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-002
Description: DBA22 (10-15)	Matrix: Solid
Date Sampled: 07/28/2022 1010	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.1 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1626	JM1		50085	4.13

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.1	U	6.1	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.1	U	6.1	2.4	ug/kg	1
Trichloroethene	79-01-6	8260D	6.1	U	6.1	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.1	U	6.1	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	47-138
1,2-Dichloroethane-d4		108	53-142
Toluene-d8		114	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-003
Description: DBA22 (15-20)	Matrix: Solid
Date Sampled: 07/28/2022 1020	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.5 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1649	JM1		50085	4.09

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.1	U	6.1	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.1	U	6.1	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	6.1	U	6.1	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.1	U	6.1	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	47-138
1,2-Dichloroethane-d4		103	53-142
Toluene-d8		109	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-004	
Description: PBDA22 (5-10)	Matrix: Solid	
Date Sampled: 07/28/2022 1030	Project Name: FPE Edgefield	% Solids: 99.1 08/02/2022 2240
Date Received: 07/28/2022	Project Number: 276	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1713	JM1		50085	4.04

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.2	U	6.2	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.2	U	6.2	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	6.2	U	6.2	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.2	U	6.2	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		108	53-142
Toluene-d8		114	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-005
Description: PBDA22 (15-20)	Matrix: Solid
Date Sampled: 07/28/2022 1040	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.1 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1737	JM1		50085	3.95

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.4	U	6.4	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.4	U	6.4	2.6	ug/kg	1
Trichloroethene	79-01-6	8260D	6.4	U	6.4	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.4	U	6.4	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		109	53-142
Toluene-d8		109	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-006
Description: PBDA22 (25-30)	Matrix: Solid
Date Sampled: 07/28/2022 1050	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.4 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1801	JM1		50085	4.06

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.2	U	6.2	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.2	U	6.2	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	6.2	U	6.2	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.2	U	6.2	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		113	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-007
Description: PBDA22 (30-35)	Matrix: Solid
Date Sampled: 07/28/2022 1100	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.1 08/08/2022 2247

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/04/2022 1825	JM1		50085	4.48

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.6	U	5.6	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.6	U	5.6	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	5.6	U	5.6	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.6	U	5.6	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	47-138
1,2-Dichloroethane-d4		109	53-142
Toluene-d8		113	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-008
Description: PBDA22 (35-40)	Matrix: Solid
Date Sampled: 07/28/2022 1110	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 99.7 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/05/2022 1156	JM1		50239	4.16

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.0	U	6.0	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.0	U	6.0	2.4	ug/kg	1
Trichloroethene	79-01-6	8260D	6.0	U	6.0	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.0	UL	6.0	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		106	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-009
Description: DOA22 (10-15)	Matrix: Solid
Date Sampled: 07/28/2022 1120	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 97.5 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/05/2022 1221	JM1		50239	4.59

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.6	U	5.6	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.6	U	5.6	2.2	ug/kg	1
Trichloroethene	79-01-6	8260D	5.6	U	5.6	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.6	UL	5.6	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		109	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-010
Description: DOA22 (20-25)	Matrix: Solid
Date Sampled: 07/28/2022 1130	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 98.7 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/05/2022 1245	JM1		50239	4.13

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	6.1	U	6.1	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260D	6.1	U	6.1	2.5	ug/kg	1
Trichloroethene	79-01-6	8260D	6.1	U	6.1	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260D	6.1	UL	6.1	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		112	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-011
Description: DOA22 (25-30)	Matrix: Solid
Date Sampled: 07/28/2022 1140	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 98.7 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/05/2022 1309	JM1		50239	4.80

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.3	U	5.3	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.3	U	5.3	2.1	ug/kg	1
Trichloroethene	79-01-6	8260D	5.3	U	5.3	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.3	UL	5.3	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		104	53-142
Toluene-d8		113	68-124

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

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Volatile Organic Compounds by GC/MS

Client: O & M, Inc.	Laboratory ID: XG28016-012
Description: DOA22 (Clay)	Matrix: Solid
Date Sampled: 07/28/2022 1150	Project Name: FPE Edgefield
Date Received: 07/28/2022	Project Number: 276
	% Solids: 98.1 08/02/2022 2240

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	08/05/2022 1333	JM1		50239	4.46

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dichloroethane	107-06-2	8260D	5.7	U	5.7	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.7	U	5.7	2.3	ug/kg	1
Trichloroethene	79-01-6	8260D	5.7	U	5.7	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260D	5.7	UL	5.7	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		102	53-142
Toluene-d8		111	68-124

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

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QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ50085-001

Matrix: Solid

Batch: 50085

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	08/04/2022 0936
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	08/04/2022 0936
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	08/04/2022 0936
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	08/04/2022 0936
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	47-138				
1,2-Dichloroethane-d4		97	53-142				
Toluene-d8		106	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ50085-002

Matrix: Solid

Batch: 50085

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	44		1	88	70-130	08/04/2022 0913
Tetrachloroethene	50	49		1	98	70-130	08/04/2022 0913
Trichloroethene	50	48		1	95	70-130	08/04/2022 0913
Vinyl chloride	50	52		1	105	70-130	08/04/2022 0913
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		91	47-138				
1,2-Dichloroethane-d4		90	53-142				
Toluene-d8		95	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: XQ50085-003

Matrix: Solid

Batch: 50085

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
1,2-Dichloroethane	50	48		1	97	9.0	70-130	20	08/04/2022 1029
Tetrachloroethene	50	57		1	113	14	70-130	20	08/04/2022 1029
Trichloroethene	50	55		1	110	14	70-130	20	08/04/2022 1029
Vinyl chloride	50	53		1	106	0.85	70-130	20	08/04/2022 1029
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		107	47-138						
1,2-Dichloroethane-d4		96	53-142						
Toluene-d8		105	68-124						

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: XQ50239-001

Matrix: Solid

Batch: 50239

Prep Method: 5035

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
1,2-Dichloroethane	5.0	U	1	5.0	2.0	ug/kg	08/05/2022 1043
Tetrachloroethene	5.0	U	1	5.0	2.0	ug/kg	08/05/2022 1043
Trichloroethene	5.0	U	1	5.0	2.0	ug/kg	08/05/2022 1043
Vinyl chloride	5.0	U	1	5.0	3.0	ug/kg	08/05/2022 1043
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	47-138				
1,2-Dichloroethane-d4		98	53-142				
Toluene-d8		103	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: XQ50239-002

Matrix: Solid

Batch: 50239

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
1,2-Dichloroethane	50	45		1	90	70-130	08/05/2022 0955
Tetrachloroethene	50	50		1	100	70-130	08/05/2022 0955
Trichloroethene	50	49		1	98	70-130	08/05/2022 0955
Vinyl chloride	50	65		1	130	70-130	08/05/2022 0955
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	47-138				
1,2-Dichloroethane-d4		96	53-142				
Toluene-d8		98	68-124				

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and \geq DL

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: XQ50239-003

Matrix: Solid

Batch: 50239

Prep Method: 5035

Analytical Method: 8260D

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
1,2-Dichloroethane	50	54		1	108	18	70-130	20	08/05/2022 1019
Tetrachloroethene	50	50		1	100	0.33	70-130	20	08/05/2022 1019
Trichloroethene	50	52		1	105	6.3	70-130	20	08/05/2022 1019
Vinyl chloride	50	73	N	1	145	11	70-130	20	08/05/2022 1019
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		99	47-138						
1,2-Dichloroethane-d4		104	53-142						
Toluene-d8		102	68-124						

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

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



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Number 137772

Client: OandM, INC.		Report to Contact: Christopher Furst		Telephone No. / E-mail: (803) 293-2416 / Chris@OandM-LLC.com		Order No.:	
Address: 450 Montbrook Ln		Sampler's Signature: <i>Christopher Furst</i>		Analysis (Attach list if more space is needed)		Page 1 of 2	
City: Knoxville		Printed Name: Christopher Furst		Barcode:		CSD: XG28016	
Project Name: FPE Edgfield		P.O. No.:		Matrix:		Remarks / Cooler LO:	
Project No. 276		Collection Date:		No. of Containers by Preservation Type:			
Sample ID / Description (Contains for each sample may be combined on one line)		Collection Time (M:PM)		Work			
DBA22 (5-10)		07/28/22 1000		✓			
DBA22 (10-15)		07/28/22 1010		✓			
DBA22 (15-20)		07/28/22 1020		✓			
PRDA22 (5-10)		07/28/22 1030		✓			
PRDA22 (15-20)		07/28/22 1040		✓			
PRDA22 (25-30)		07/28/22 1050		✓			
PRDA22 (30-35)		07/28/22 1100		✓			
PRDA22 (35-40)		07/28/22 1110		✓			
DOA22 (10-15)		07/28/22 1120		✓			
DOA22 (20-25)		07/28/22 1130		✓			

Turn Around Time Required (Prior lab approval required for expedited TAT)		Sample Disposal		Possible Hazard Identification		QC Requirements (Specify)	
<input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown		Date	
1. Relinquished by <i>Christopher J. Furst</i>		Date: 07/28/22 1150		1. Received by		Date	
2. Relinquished by		Date		2. Received by		Date	
3. Relinquished by		Date		3. Received by		Date	
4. Relinquished by		Date		4. Laboratory received by <i>Wanda N. Roberts</i>		Date: 07/28/22 1230	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		LAB USE ONLY		Received on line (Check) <input type="checkbox"/>		Temp Blank <input type="checkbox"/> Y <input type="checkbox"/> N	
		Mo		No		Ino Pump	
		Receiv. Temp.		3.8		°C	

Document Number: MED03V2-01

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy



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Number 137773

Client <u>OCALIM INC.</u> Address <u>450 Montbrach Ln</u> City <u>Knoxville</u> State <u>TN</u> Zip Code <u>37919</u>		Report to Contact <u>Christopher Fuerst</u> Telephone No. / E-mail <u>(865) 243-3416 / chris@ocalim.com</u>		Quote No. Page <u>2</u> of <u>2</u> XG28016 CSO	
Sampler's Signature Printed Name <u>Christopher J. Fuerst</u>		Analysts (Attach list if more space is needed) <u>00988</u>		Remarks / Cooler L.O.	
Project Name <u>EPE Edgefield</u>		Material		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
Project No. <u>276</u>		No. of Containers by Preservative Type		1. Received by	
Sample #1 / Description (Containers for each sample may be combined on one line)		Collection Date(s)		Date Time	
<u>DOA22 (25-30)</u>		<u>07/28/13</u>		<u>07/28/13 1150</u>	
<u>DOA22 (Clay)</u>		<u>07/28/13</u>		2. Received by	
3. Relinquished by		Date Time		Date Time	
4. Relinquished by		Date Time		Date Time	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		4. Laboratory received by <u>LAB USE ONLY</u> Received on the (Circle) <u>Yes</u> No <input type="checkbox"/> for Pack <input type="checkbox"/>		Receipt Temp. <u>3.8</u> °C	

Document Number: ME0039-01

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

Pace Analytical

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

Revised: 9/29/2020
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: O&M Inc

Cooler Inspected by/date: hml / 07/28/22 Lot #: XG28016

Means of receipt: Pace Client UPS FedEx Other:

Yes No NA 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: NK Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 22-1253
3.8 / 3.8 °C NA / NK °C NK / NA °C NK / NA °C

Method: Temperature Blank Against Bottles IR Gun ID: 56 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 1/2 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" (1/4" 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 #

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

Sample(s) NK were received incorrectly preserved and were adjusted accordingly in sample receiving with NA ml. of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA

Time of preservation NK. 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 (Na₂S₂O₃) with Shealy ID: NA

SR barcode labels applied by: hml Date: 07/28/22

Comments:
