400801

DUKE ENERGY®

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526 South Church Street
Mail Code EC13K
Charlotte, NC 28202

o 980.373.2663
c 704.497.3627
f. 000.000.0000

January 15, 2019

Mr. Greg Cassidy, Brownfields Project Manager
South Carolina Department of Health and Environmental Control
Division of Site Assessment, Remediation, and Revitalization
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Subject: Quarterly Progress Report-Fourth Quarter 2018
Former Bramlette Manufactured Gas Plant
400 East Bramlette Road
Greenville, South Carolina
VCC 16-5857-RP

Dear Mr. Cassidy:

This Quarterly Progress Report has been prepared for the referenced site in accordance with the requirements of the Responsible Party Voluntary Cleanup Contract (VCC 16-5857-RP) between Duke Energy Carolinas (Duke Energy) and the South Carolina Department of Health and Environmental Control (SCDHEC), dated July 29, 2016.

The following sections provide a summary of work performed during the reporting period, work to be performed during the next reporting period, a summary of test or sampling results generated during the reporting period, and environmental problems experienced during the reporting period and their resolution. The work was conducted in accordance with the April 13, 2018 Remedial Investigation Work Plan Addendum (RIWP-A) submitted by Duke Energy and approved by the SCDHEC on April 24, 2018.

A summary of findings based on the results of the work is provided below:

- Volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were not detected at concentrations exceeding the laboratory reporting limits (RLs) in groundwater samples collected from newly installed monitoring wells MW-30S, MW-31S, and MW-31TZ (located along the Swamp Rabbit trail near the east bank of the Reedy River). The RLs were below the applicable comparative standards or screening levels as defined in the RIWP-A.
- VOCs and SVOCs were not detected at concentrations exceeding the RLs in surface water samples (SW-7 through SW-12) collected from the Reedy River. The RLs were below the applicable comparative standards or screening levels as defined in the RIWP-A.
- VOCs were not detected at concentrations exceeding the RLs in sediment samples (SW-7-SED through SW-12-SED) collected from the Reedy River. The RLs were below the applicable comparative standards or screening levels as defined in the RIWP-A.
- Limited detections of SVOCs were reported in sediment samples SW-7-SED and SW-12-SED (and Duplicate Sample SW-DUP 1-SED) at concentrations exceeding the RLs. However, the specific compounds detected do not have a comparative standard or

screening level and will be addressed in the Risk Assessment and Groundwater Remedial Investigation (RI) Report. These compounds are commonly found in environmental media at industrial facilities. Potential source(s) of these compounds will be further evaluated during the ongoing Groundwater RI. Remaining SVOC concentrations were below the RLS, and The RLs were below the applicable comparative standards or screening levels as defined in the RIWP-A.

Work Performed During the Reporting Period

Activities performed during the fourth quarter (October 1 through December 31, 2018) were conducted in accordance with the RIWP-A and included the following:

- From October 9 through 11, 2018, monitoring wells MW-31S and MW-31TZ were installed and developed along the Swamp Rabbit Trail near the east bank of the Reedy River (Attachment A, Figure 1) using a mini-sonic rig.
- On October 24, 2018, four drums of non-hazardous investigation derived waste (IDW) including drill cuttings (two drums) and decontamination fluids and development water (two drums) were removed from the site by VLS Recovery Services (VLS) for proper off-site disposal. The manifest is provided in Attachment B.
- On December 4 and 5, 2018, monitoring well MW-30S was installed and developed along the Swamp Rabbit Trail near the east bank of the Reedy River (Attachment A, Figure 1) using a direct-push rig equipped with hollow-stem augers. The lighter direct-push rig was used in place of the mini-sonic rig to avoid damage to the Swamp Rabbit Trail during mobilization and drilling. The direct-push rig also requires a smaller working footprint allowing safe access to the drilling location in the limited space between the Swamp Rabbit Trail and steep bank of the Reedy River. Proposed monitoring well PMW-30TZ was not installed due to equipment limitations from the change in drilling method.
- On December 11, 2018, two drums of non-hazardous IDW including drill cuttings (one drum) and decontamination fluids and development water (one drum) were removed from the site by VLS for proper off-site disposal. The manifest is provided in Attachment B.
- On December 12, 2018, groundwater samples were collected from monitoring wells MW-30S, MW-31S, and MW-31TZ for analysis of VOCs by U.S. Environmental Protection Agency (EPA) Method 8260 and SVOCs by EPA Method 8270.
- On December 13, 2018, two drums of non-hazardous IDW consisting of decontamination fluids and purge water were removed from the site by VLS for proper off-site disposal.
- On December 12, 2018, slug tests were conducted on monitoring wells MW-30S, MW-31S, and MW-31TZ in accordance with ASTM International D4044.
- On December 14, 2018, Revision No. 2 of the site-specific Health and Safety Plan (HASP), which was updated to include the next phase of work, was submitted to the SCDHEC.
- On December 19, 2018, surface water samples SW-7 through SW-12 were collected from the Reedy River (Attachment A, Figure 2) for analysis of VOCs by EPA Method 8260 and SVOCs by EPA Method 8270.

- On December 19, 2018, sediment samples SW-7-SED through SW-12-SED were collected from the Reedy River (Attachment A, Figure 2) at the same locations as surface water samples SW-7 through SW-12 for analysis of VOCs by EPA Method 8260 and SVOCs by EPA Method 8270.
- On December 21, 2018, the location and elevation of monitor wells MW-30S, MW-31S, and MW-31TZ were surveyed relative to the North American Vertical Datum (NAVD 1988).
- On December 21, 2018, water level transducers/data loggers were installed in monitoring wells MW-13R (shallow), MW-26 (bedrock), MW-27 (saprolite), MW-31S, and MW-31TZ (Attachment A, Figure 1) to monitor changes in water levels over time.
- On January 7, 2019, water level data was downloaded from transducers/data loggers. Although this activity occurred outside the fourth quarter 2018 reporting period, the download included data from within the reporting period and has been included in this report for completeness.

Work to be Performed During the Next Reporting Period (First Quarter 2019)

The following activities are tentatively scheduled to be conducted in accordance with Section 4 of the RIWP-A during the first quarter (January 1 through March 31, 2019). The proposed schedule is subject to change based on weather conditions, access to the Vaughn Landfill, availability of subcontractors, materials, and/or equipment, and other unforeseen delays. Field work notifications will be provided in accordance with the VCC and access agreements prior to initiating each phase of the work.

- Vegetation clearing to support monitor well installation and abandonment, non-aqueous phase liquid (NAPL) assessment, and groundwater, surface water, and sheen sampling – February 2019
- Ground penetrating radar (GPR) and electromagnetic (EM) survey to identify potential subsurface utilities at the drilling locations – February 2019
- Install and develop monitoring wells PMW-29S (shallow) and PMW-29TZ (transition zone) on the north side of Bramlette Road in Parcel 2 (Attachment A, Figure 1) and monitoring well PMW-32B (bedrock) in the Vaughn Landfill on Parcel 3 adjacent to existing monitoring wells MW-3 and MW-20 (Attachment A, Figure 1) –February 2019
- Abandon monitoring wells MW-3D, MW-6A, MW-19, MW-23, and MW-24 in accordance with South Carolina Well Standards R. 61-71(Attachment A, Figure 1) - February 2019
- Install three staff gages within the surface water adjacent to the Vaughn Landfill on Parcel 3 (Attachment A, Figure 1) - February 2019
- Conduct NAPL assessment (Attachment A, Figure 10) February and March 2019
- Survey location and elevation of monitoring wells, staff gages, and soil borings upon completion of the drilling program – March 2019
- Slug testing of newly installed monitor wells, comprehensive (site-wide) groundwater monitoring event, surface water and sediment sampling within the Vaughn Landfill, and sheen inspection and sampling - March 2019
- IDW disposal – Weekly pickup during drilling program and at completion of sampling program

- Download and monitor water level transducers/data loggers and Reedy River stage from a United States Geological Survey (USGS) stream gaging station located downstream of the site - Monthly

Summary of Test or Sampling Results Generated During Reporting Period

A summary of the test and sampling results for work performed during the fourth quarter (October 1 through December 31, 2018) is provided below:

- Construction details for monitoring wells MW-30S, MW-31S, and MW-31TZ are listed in Table 1 (Attachment C). The well permit, geologist logs, and Water Well Records (Form 1903) are provided in Attachment D.
- Slug test data for monitoring wells MW-30S, MW-31S, and MW-31TZ were analyzed using AQTESOLV™, and the results are provided in Attachment E. Geometric Mean hydraulic conductivity values of the shallow zone range from to approximately 7 ft/day (0.0025 cm/sec) at monitoring well MW-31S to 16 ft/day (0.0056 cm/sec) at monitoring well MW-30S.The Geometric Mean hydraulic conductivity values of transition zone monitoring well MW-31TZ is approximately 0.5 ft/day (0.00018 cm/sec).
- VOCs and SVOCs were not detected at concentrations exceeding the RLs in groundwater samples collected from monitoring wells MW-30S, MW-31S, and MW-31TZ. The RLs were below the applicable comparative standards or screening levels as defined in the RIWP-A. The analytical laboratory report is provided in Attachment F. The data have been reviewed for quality and completeness and approved for release by Pace Analytical. Full data validation in accordance with Section 6 of the September 2018 Quality Assurance Project Plan (QAPP) will be conducted prior to submittal of the Groundwater RI Report.
- VOCs and SVOCs were not detected at concentrations exceeding the RLs in surface water samples SW-7 through SW-12.The RLs were below applicable comparative standards or screening levels as defined in the RIWP-A. The analytical laboratory report is provided in Attachment F. The data have been reviewed for quality and completeness and approved for release by Pace Analytical. Full data validation in accordance with Section 6 of the QAPP will be conducted prior to submittal of the Groundwater RI Report.
- A summary of the analyses results for sediment samples SW-7-SED through SW-12-SED is listed in Table 2 (Attachment C). VOCs and SVOCs were not detected at concentrations exceeding the applicable standards or screening levels as defined in the RIWP-A. The analytical laboratory report is provided in Attachment F. The data have been reviewed for quality and completeness and approved for release by Pace Analytical. Full data validation in accordance with Section 6 of the QAPP will be conducted prior to submittal of the Groundwater RI Report.
- Time series hydrographs from December 21, 2018 through January 7, 2019 for the data downloaded from the data loggers in monitoring wells MW-13R (shallow), MW-26 (bedrock), MW-27 (saprolite), which are located on the former MGP site on Parcel 1 (Attachment A, Figure 1), and a USGS stream gaging station located downstream of the site are provided in Attachment G. Time series hydrographs from December 21, 2018 through January 7, 2019 for the data downloaded from the data loggers in monitoring wells MW-31S, and MW-31TZ, which are located along the Swamp Rabbit Trail near the east bank of the Reedy River (Attachment A, Figure 1), and a USGS stream gaging

station located downstream of the site also are provided in Attachment G. The river stage fluctuated approximately four feet during the period of record. Water levels in the monitoring wells located on the former MGP site fluctuated approximately 0.5 feet during the same time period and appear to respond to fluctuations in river stage within one to two days. Water levels in the monitoring wells located along the Swamp Rabbit Trail near the east bank of the Reedy River fluctuated approximately three to 3.5 feet during the period of record and appear to respond to fluctuations in river stage in less than one day.

Environmental Problems Identified During Reporting Period and Their Resolution

- While beyond the reporting period of this document, Duke Energy, SynTerra, and CSXT Security personnel conducted a site visit on January 11, 2019. Based on observed conditions, CSXT will remove trespassers and clean up the area prior to initiating the vegetation clearing and work described in the RIWP-A. Therefore, the projected start date for the field program has been postponed until early- to mid-February 2019. Field work notifications will be provided in accordance with the VCC and access agreements prior to initiating each phase of the work.

If you have any questions regarding this submittal, please contact me at 980.373.2663 or by email at Richard.Powell2@duke-energy.com.

Sincerely,

Richard E. Powell

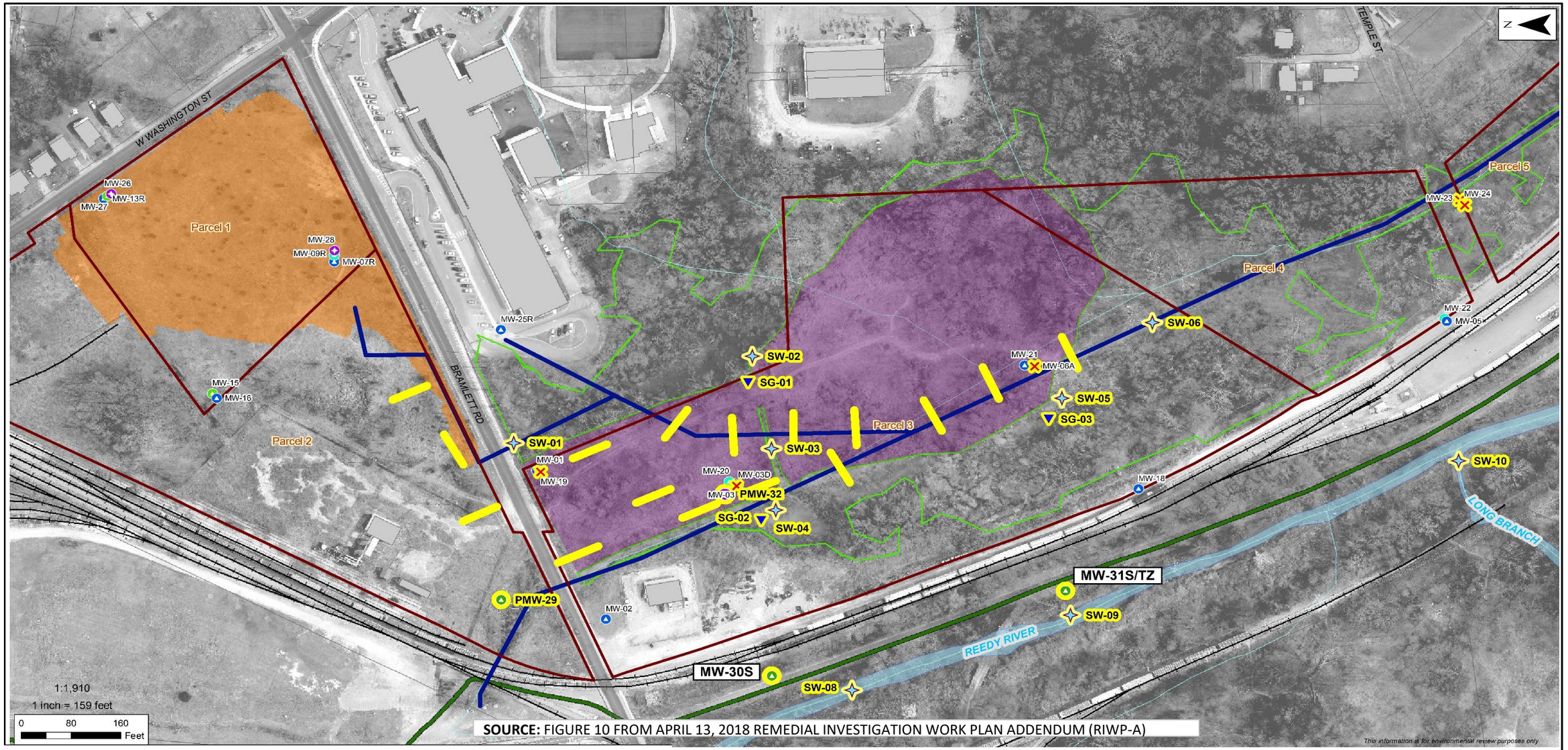
Richard E. Powell, P.G.
Senior Environmental Specialist

cc: Kevin Boland, CSXT
Daniel Schmitt, Esq., CSXT
Ty Houck, Greenville County
Todd Plating, SynTerra

Enclosures:
Attachment A - Figures
Figure 1 – Proposed Work Plan Activities
Figure 2 – Proposed Sediment/Surface Water Samples
Attachment B - IDW Manifests
Attachment C - Tables
Table 1 - Construction Details for Newly Installed Monitoring Wells
Table 2 - Summary of Analytical Results for Sediment Samples
Attachment D - Monitoring Well Records
Attachment E - Slug Test Data Analysis
Attachment F - Analytical Laboratory Reports
Attachment G - Hydrographs

ATTACHMENT A

Figures



SOURCE: FIGURE 10 FROM APRIL 13, 2018 REMEDIAL INVESTIGATION WORK PLAN ADDENDUM (RIWP-A)

- Former Drainage Ditch
- Excavated Area (2001-2002)
- Approximate Vaughn Landfill Boundary
- Proposed Boring Transect (3 borings each)

Proposed Locations

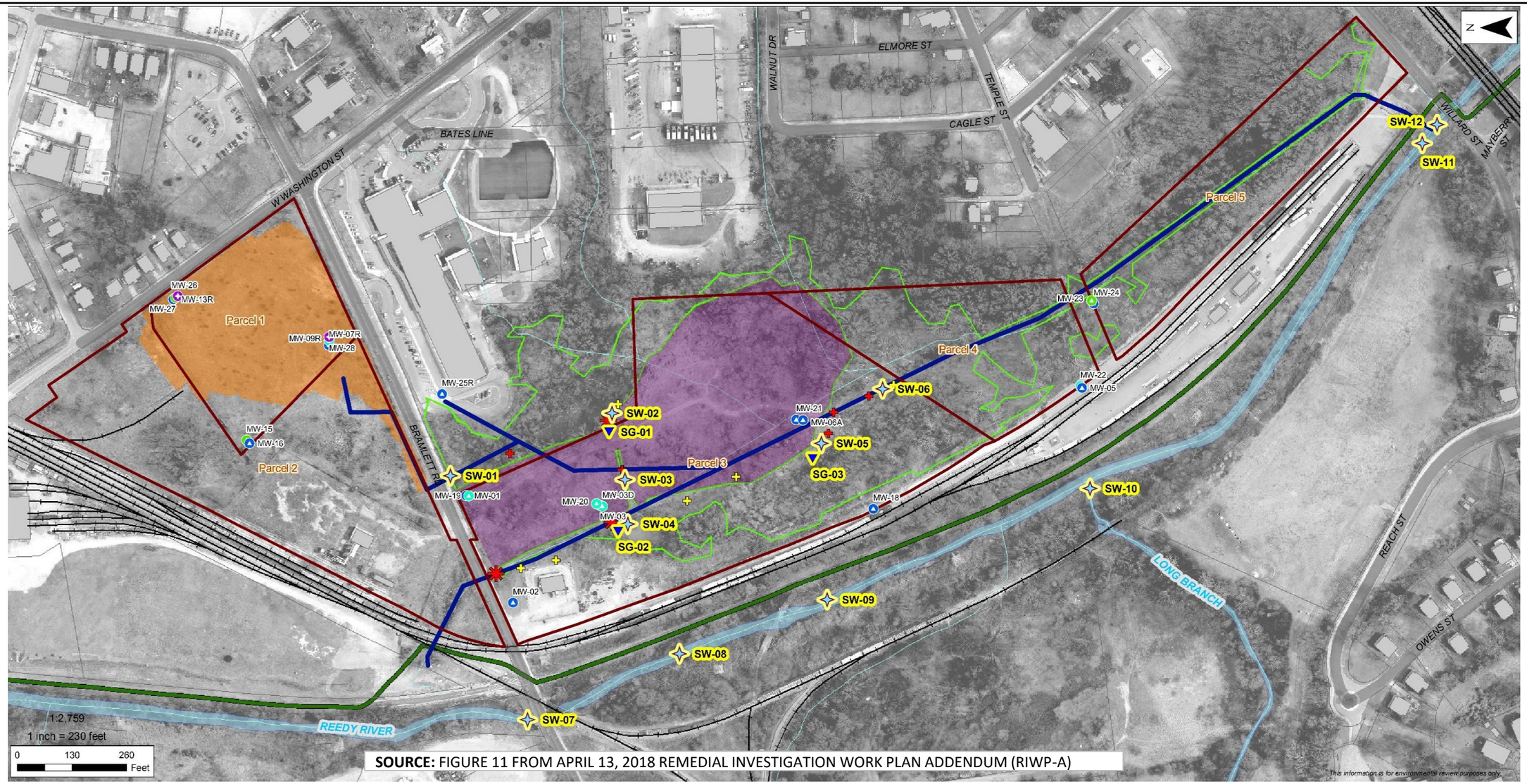
- Surface Water / Sediment Samples
- Stream Gauge
- Shallow
- Mid Saprolite
- Deep Saprolite
- Bedrock
- Shallow & Saprolite Well Pair
- Bedrock Well
- Proposed Well to Abandon

148 RIVER STREET, SUITE 220
GREENVILLE, SOUTH CAROLINA 29601
PHONE (864) 421-9999
http://www.synterracorp.com

DRAWN BY: H. Frank Date: 1/10/2019
PROJECT MANAGER: Todd Plating

1/14/2019 C:\Users\MMASTB~1\AppData\Local\Temp\A_Figure 10 and 11

FIGURE 1
PROPOSED WORK PLAN ACTIVITIES
FORMER DUKE ENERGY MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA



SOURCE: FIGURE 11 FROM APRIL 13, 2018 REMEDIAL INVESTIGATION WORK PLAN ADDENDUM (RIWP-A)

- Former Drainage Ditch
- Excavated Area (2001-2002)
- Approximate Vaughn Landfill Boundary
- Surface water sheen (12/2017)
- 1995-1996 Sediment Sample
- 1995-1996 Sediment Sample with visable coal tar

Proposed Locations

- Surface Water / Sediment Samples
- Stream Gauge

- Shallow
- Mid Saprolite
- Deep Saprolite
- Bedrock

148 RIVER STREET, SUITE 220
GREENVILLE, SOUTH CAROLINA 29601
PHONE (864) 421-9999
http://www.synterracorp.com

DRAWN BY: H. Frank Date: 1/10/2019
PROJECT MANAGER: Todd Plating

1/14/2019 C:\Users\MMASTB~1\AppData\Local\Temp\A_Figure 10 and 11

FIGURE 2
PROPOSEDSEDIMENT/SURFACE WATER SAMPLES
FORMER DUKE ENERGY MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA

ATTACHMENT B

IDW Manifests

VLS recovery services, llc

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	[illegible]			[illegible]

5. Generator's Name and Mailing Address

Duke Energy - Anchor QEA
400 W Bramlette Rd
Greenville, SC, SC 29601

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: NuEarth, LLC — U.S. EPA ID Number: SCR000779454

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

VLS Recovery Services, LLC
305 S Main St
Mauldin, SC 29662

U.S. EPA ID Number: SCR000762468

Facility's Phone: 864-962-9963

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous | Non-Regulated Profile# 22600 | Soil Cuttings	2	DM			
2.	Non-Hazardous | Non-Regulated Profile# 22601 | Purge Water	2	DM			
3.						
4.						

13. Special Handling Instructions and Additional Information

Wednesday, 10.24.2018
Contact: Tom King | 803.429.2656

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Tom King	[signature]	10	24	18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Matthew Parker	Matthew Parker	10	24	18
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

VLS recovery services, llc

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
				12HR45E

GENERATOR

5. Generator's Name and Mailing Address

Duke Energy Carolinas, LLC.
400 East Bramlett Rd
Greenville, SC 29601

Generator's Site Address (if different than mailing address)

c/o Synterra

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

VLS Recovery Services — SCR000762455

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

VLS Recovery Services, LLC
305 S Main St
Mauldin, SC 29662

SCR000762455

Facility's Phone: 864-962-9953

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous | Non-Regulated Profile# 25038 | Soil Cuttings	1	DM	250	P	
2.	Non-Hazardous | Non-Regulated Profile# 25039 | Groundwater & Decontamination Water	1	DM	250	P	
3.						
4.						

13. Special Handling Instructions and Additional Information

Friday, 12.07.2018
Contact: Rick Powell | 980.373.2663

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month 12 Day 14 Year 18

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month 12 Day 14 Year 18

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year

VLS recovery services, llc

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

5. Generator's Name and Mailing Address
Duke Energy Carolinas, LLC
400 East Bramlett Rd
Greenville, SC 29601

Generator's Phone:

Generator's Site Address (if different than mailing address)
c/o Synterra

6. Transporter 1 Company Name VLS Recovery Services — U.S. EPA ID Number SCR000762465

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address VLS Recovery Services, LLC
305 S Main St
Mauldin, SC 29662
854 962-9953
Facility's Phone:
U.S. EPA ID Number SCR000762465

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2. Non-Hazardous | Non-Regulated Profile# 25039 | Groundwater & Decontamination Water	2	PAK	2		
	3.					
	4.					

13. Special Handling Instructions and Additional Information
Thursday, 12.15.2016
Contact: Brian | 906 433 5889

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month Day Year

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name — Signature — Month Day Year
Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name — Signature — Month Day Year

ATTACHMENT C

Tables

Table 1

Construction Details for Newly Installed Monitoring Wells

Quarterly Progress Report - Fourth Quarter 2018
Former Bramlette Manufactured Gas Plant
Greenville, South Carolina
VCC 16-5857-RP

Monitoring Well ID	Owner/Parcel	Monitoring Zone	Date(s) Installed	Material	Diameter (inches)	Surface Casing (Feet-BGS)	Latitude	Longitude	Measuring Point TOC Elevation (Feet- NAVD)	Ground Surface Elevation (Feet- NAVD)	Total Well Depth (Feet-BGS)	Screened Interval (Feet-BGS)
MW-30S	Greenville County/ Swamp Rabbit Trail	Residuum/ Saprolite	12/4 - 12/5/2018	PVC	2	NA	34.859963	-82.420715	932.60	932.84	19.9	4.9 - 19.9
MW-31S	Greenville County/ Swamp Rabbit Trail	Residuum/ Saprolite	10/10 - 10/11/2018	PVC	2	NA	34.858685	-82.420131	932.11	932.51	20	5 - 20
MW-31TZ	Greenville County/ Swamp Rabbit Trail	Transition Zone/ Top of Bedrock	10/9 - 10/10/2018	PVC	2	NA	34.858727	-82.420048	932.07	932.37	38	28 - 38

Prepared by: ALL Checked by: MSM

Notes:

BGS = Below ground surface
BTOC = Below Top of casing
NAVD = North American Vertical Datum (1988)
NA = Not Applicable

Table 2

Summary of Analytical Laboratory Results for Sediment Samples
Collected from the Reedy River

Quarterly Progress Report - Fourth Quarter 2018
Former Bramlette Manufactured Gas Plant
Greenville, South Carolina
VCC 16-5857-RP

Sample ID	Date	Method/Constituent						
		EPA 8270D (micrograms per kilogram [µg/kg])						
		Reporting Limit (RL)	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Pyrene
SW-7-SED	12/19/2018	451	ND	ND	ND	ND	ND	ND
SW-8-SED	12/19/2018	420	ND	ND	ND	ND	ND	ND
SW-9-SED	12/19/2018	423	ND	ND	ND	ND	ND	ND
SW-10-SED	12/19/2018	420	ND	ND	ND	ND	ND	ND
SW-11-SED	12/19/2018	449	ND	ND	ND	ND	ND	ND
SW-12-SED MS/MSD	12/19/2018	411	503	435	562	490	822	791
SW-DUP 1-SED	12/19/2018	419	ND	ND	ND	ND	ND	ND

Prepared by: ALL Checked by: MSM

Notes:
ND = Not Detected at concentration exceeding the laboratory reporting limit.

ATTACHMENT D

Monitoring Well Records

dhec
Healthy People. Healthy Communities.

July 19, 2018

Richard Powell
Duke Energy Carolinas
526 S Church St
Charlotte NC 28202

RE: CSXT Bramlette Road Site
SCDHEC Monitoring Well Approval MW-11615
Greenville County

Dear Mr. Powell:

The Division of Site Assessment, Remediation and Revitalization has reviewed the request to install up to 8 permanent groundwater monitoring wells at the CSXT Bramlette Road Site as described in the Monitoring Well Application received on July 18, 2018.

Based on this review, approval for installation is granted under R.61-71 of the South Carolina Well Standards and Regulations. Once data is received, a report should be sent to the Department summarizing the recent work. Should you have any questions regarding the above, you may contact me at (803) 898-0910.

Sincerely,

Greg Cassidy, Project Manager
State Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management

cc: Natalie Kirkpatrick, Upstate EA Region
Corey League, PG, ERM NC Inc. , 15720 Brixham Hill Ave #120, Charlotte NC 28277
File # 400801

Monitoring Well Approval

Approval is hereby granted to: Richard Powell, Duke Energy Carolinas
Facility: CSXT Bramlette Road Site
Greenville County

This approval is for the installation of up to 8 groundwater monitoring wells. The monitoring wells are to be installed in the areas described by ERM NC Inc. and per the proposed construction details provided in the request. The monitoring wells are to be installed following all of the applicable requirements of R.61-71.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.

2. All wells shall be properly developed per R.61-71.H.2.d. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted within 30 days after well completion or abandonment unless the Department has approved another schedule. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f

3. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.

4. All monitoring wells shall be labeled as required by R.61-71.H.2.c.

5. All soil borings points that penetrate any confining unit must be grouted in accordance with R. 61-71.

6. If any of the information provided to the Department changes, the Author (Greg Cassidy) shall be notified a minimum of twenty-four hours prior to well construction as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated May 27, 2016.

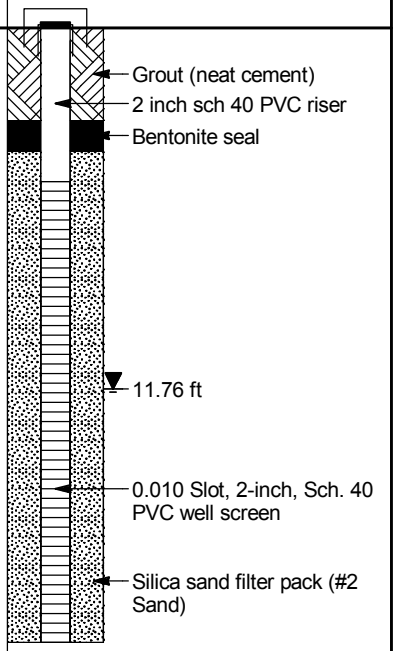
Date of Issuance: **07/19/2018** **Approval #:** **MW-11615**

Greg Cassidy, Project Manager
State Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management

PROJECT:	Bramlette Road MGP Site	WELL / BORING NO:	**MW-30S**
PROJECT NO:	1026.800	STARTED: 12/4/18	COMPLETED: 12/5/18
DRILLING COMPANY:	Cascade Drilling	NORTHING: TBD	EASTING: TBD
DRILLING METHOD:	Hollow Stem Augers/DPT	G.S. ELEV: TBD	M.P. ELEV: TBD
BOREHOLE DIAMETER:	4.25 IN	DEPTH TO WATER: 11.76 ft TOC	TOTAL DEPTH: 19.9 ft BGS
NOTES:	Well Permit #MW-11615	LOGGED BY: T. King	CHECKED BY: H. Frank

DEPTH (ft)	USCS	DESCRIPTION	SAMPLE	RECOV. (%)	BLOW COUNTS	PID (ppm)
0	SM	SAND, silty, brown, dry, organic material				
	ML	SILT, sandy, red-orange, mica present, moist, noncohesive (FILL)		60		
	CL	CLAY, silty, orange, moist, noncohesive (FILL)				
5	ML	SILT, sandy, red grey, moist, noncohesive (FILL)		60		
	CL	CLAY, silty, red, high plasticity, cohesive, moist (FILL)				
10	SM	SAND, silty, red, cohesive, low plasticity moist (RESIDUUM)		100		
15	SP	SAND, grey, non-cohesive, wet (RESIDUUM)		100		
	SM	SAND, silty, grey to red-orange, foliation present from highly weathered parent rock, wet (SAPROLITE)				
20		Bottom of boring 20 feet				

WELL CONSTRUCTION



SynTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
Phone: 864-421-9999

CLIENT: Duke Energy Carolinas, LLC.
PROJECT LOCATION: Greenville, SC

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Duke Energy Carolinas, LLC. (last) (first)
Address: 526 South Church Street
City: Charlotte State: NC Zip: 28202
Telephone: Work: (980) 373-2663 Home:

2. LOCATION OF WELL: COUNTY: Greenville
Name: CSXT Bramlette Site
Street Address: 400 East Bramlette Road
City: Greenville Zip: 29611
Latitude: 34.859963 Longitude: -82.420715

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
FILL	10	10
RESIDUUM	8	18
SAPROLITE	2	20
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-30S

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other DPT/Hollow Stem Auger

7. PERMIT NUMBER: MW-11615

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 19.90 ft. Date Started: 12/4/18 Date Completed: 12/5/18

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 in.
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 4.90 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2 in.
Slot/Gauge: 0.010 Length: 15
Set Between: 4.90 ft. and 19.90 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 11.76 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 4 ft. to 19.90 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 3 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Richard Mooney CERT. NO.: 1435
Address: (Print) 825 South Main Street, New Ellenton, SC 29809
Level: A B ✓ C D (circle one)
Telephone No.: (803) 220-3735 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Richard Mooney Well Driller Date: 12-19-18

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

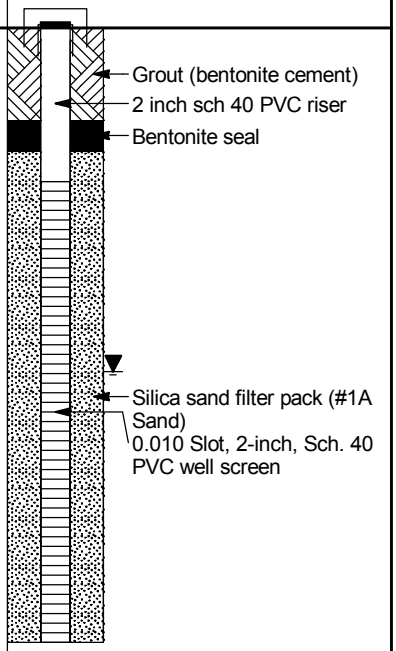
COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

PROJECT:	Bramlette Road MGP Site	WELL / BORING NO:	**MW-31S**
PROJECT NO:	1026.800	STARTED: 10/10/18	COMPLETED: 10/11/18
DRILLING COMPANY:	Cascade Drilling	NORTHING:	EASTING:
DRILLING METHOD:	Rotary Sonic	G.S. ELEV: ft	M.P. ELEV: ft
BOREHOLE DIAMETER:	6 IN	DEPTH TO WATER: 11.18 ft TOC	TOTAL DEPTH: 20.0 ft BGS
NOTES:	Well Permit #MW-11615	LOGGED BY: T. King	CHECKED BY: H. Frank

DEPTH (ft)	USCS	DESCRIPTION
	OL	TOPSOIL, brown silt with clay, loose, organic material, dry (FILL)
	ML	SILT, sandy, light grey, loose, dry (FILL)
	ML	SILT, sandy, redish-orange, loose, dry (FILL)
	SM	SAND, silty, black, loose, dry (FILL)
5	CL	CLAY, some silt, very stiff, slight moisture (FILL)
10	SC SM	SAND, with clay and some silt, yellow to light brown, wet, cohesive, low plasticity (RESIDUUM)
15	SC SM	SAND, silty with clay, light grey to light brown, extremely weathered gravel sized parent material, wet (SAPROLITE)
20		Bottom of boring 20 feet
25		
30		
35		
40		
45		

SAMPLE | RECOV. (%) | BLOW COUNTS | PID (ppm)

WELL CONSTRUCTION



SynTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
Phone: 864-421-9999

CLIENT: Duke Energy Carolinas, LLC.
PROJECT LOCATION: Greenville, SC

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release

1. WELL OWNER INFORMATION:
Name: Duke Energy Carolinas, LLC. (last) (first)
Address: 526 South Church Street
City: Charlotte State: NC Zip: 28202
Telephone: Work (980) 373-2663 Home:

2. LOCATION OF WELL: COUNTY: Greenville
Name: CSXT Bramlette Site
Street Address: Bramlette Road
City: Greenville Zip: 29611
Latitude: 34.858685 Longitude: -82.420131

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
FILL	9 ft	9 ft
RESIDUUM	5 ft	14 ft
SAPROLITE	6 ft	20 ft
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-31S

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other **Sonic**

7. PERMIT NUMBER: MW-11615

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 10/10/18 Date Completed: 10/11/18

10. CASING: ☑ Threaded ☐ Welded
Diam: 2 in.
Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in to 5 ft. depth
_____ in to _____ ft depth
Height Above/Below Surface _____ ft.
Weight _____ lb /ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam: 2 in.
Slot/Gauge: 0.010 Length: 15 ft.
Set Between: 5 ft and 20 ft.
_____ ft and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 11.18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface
_____ ft after _____ hrs Pumping _____ G.P.M.
Pumping Test ☐ Yes (please enclose) ☑ No
Yield _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 4 ft to 20 ft.
Effective size 1A Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth From 0 ft to 4 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type _____ Amount _____

18. PUMP: Date installed _____ Not installed ☑
Mfr Name _____ Model No _____
H.P _____ Volts _____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: J. Hall Jr. CERT. NO.: 1398
Address (Print)
825 South Main Street
New Ellenton SC 29809
Level: A B ✓ C D (circle one)
Telephone No: (803) 220-3735 Fax No:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: James A Hall Jr. (Well Driller) Date: 10/11/18

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

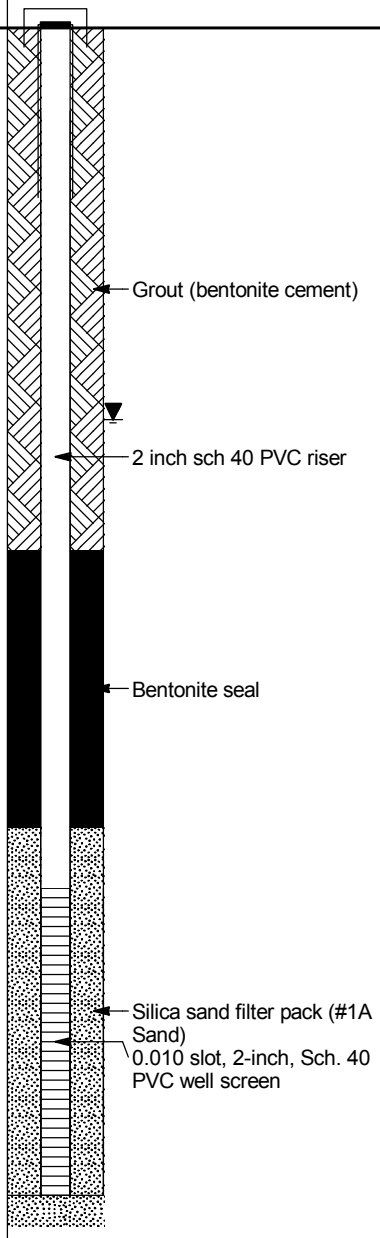
COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

PROJECT:	Bramlette Road MGP Site	WELL / BORING NO:	**MW-31TZ**
PROJECT NO:	1026.800	STARTED: 10/9/18	COMPLETED: 10/10/18
DRILLING COMPANY:	Cascade Drilling	NORTHING:	EASTING:
DRILLING METHOD:	Rotary Sonic	G.S. ELEV: ft	M.P. ELEV: ft
BOREHOLE DIAMETER:	6 IN	DEPTH TO WATER: 12.75 ft TOC	TOTAL DEPTH: 39.0 ft BGS
NOTES:	Well Permit #MW-11615	LOGGED BY: T. King	CHECKED BY: H. Frank

DEPTH (ft)	USCS	DESCRIPTION	RECOV. (%)
	OL	TOPSOIL, brown silt with clay, loose, organic material, dry (FILL)	
	ML	SILT, sandy, light grey, loose, dry (FILL)	
	ML	SILT, sandy, redish-orange, loose, dry (FILL)	
	SM	SAND, silty, black, loose, dry (FILL)	
5	CL	CLAY, silty, very stiff, slight moisture. Note: Low recovery caused from the core barrel plugging off due to the cohesiveness of the soil. (FILL)	31
10	SC SM	SAND, with clay and silt, yellow to light brown, wet, cohesive, low plasticity (RESIDUUM)	
15	SC SM	SAND, silty with clay, light grey to light brown, extremely weathered gravel sized parent material, wet (SAPROLITE)	80
20	CL ML	CLAY, silty, light brown, mostly comprised of highly weathered rock, moist (SAPROLITE)	
25	RK	GNEISS, granitic, slightly weathered, light grey, dry (TRANSITION ZONE)	50
30	RK	GNEISS, granitic, interlayered fresh and moderately weathered rock, oxidized minerals present, wet (TRANSITION ZONE)	100
35	RK	GNEISS, granitic, fresh, strong, dry (BEDROCK)	100
40		Bottom of boring 39 feet	
45			

BLOW COUNTS | PID (ppm)

WELL CONSTRUCTION



SynTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
Phone: 864-421-9999

CLIENT: Duke Energy Carolinas, LLC.
PROJECT LOCATION: Greenville, SC

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Duke Energy Carolinas, LLC. (last) (first)
Address: 526 South Church Street
City: Charlotte State: NC Zip: 28202
Telephone: Work: (980) 373-2663 Home:

2. LOCATION OF WELL: **COUNTY:** Greenville
Name: CSXT Bramlette Site
Street Address: Bramlette Road
City: Greenville Zip: 29611
Latitude: 34.858727 Longitude: -82.420048

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
FILL	9 ft.	9 ft.
RESIDUUM	5 ft.	14 ft.
SAPROLITE	11 ft.	25 ft.
TRANSITION ZONE	9 ft.	34 ft.
BEDROCK	--	--
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-31TZ

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other **Sonic**

7. PERMIT NUMBER: MW-11615

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 10/9/18
38 ft. Date Completed: 10/10/18

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 in.
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 28 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2 in.
Slot/Gauge: 0.010 Length: 10 ft.
Set Between: 28 ft. and 38 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 12.75 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface:
_____ ft. after _____ hrs. Pumping _____ GPM
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 26 ft. to 39 ft.
Effective size 1A Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 26 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: J. Hall Jr. **CERT. NO.:** 1398
Address: (Print)
825 South Main Street
New Ellenton SC 29809
Level: A B C D (circle one)
Telephone No.: (803) 220-3735 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: J. A. Hall Jr. (Well Driller) Date: 10-10-18

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

ATTACHMENT E

Slug Test Data Analysis

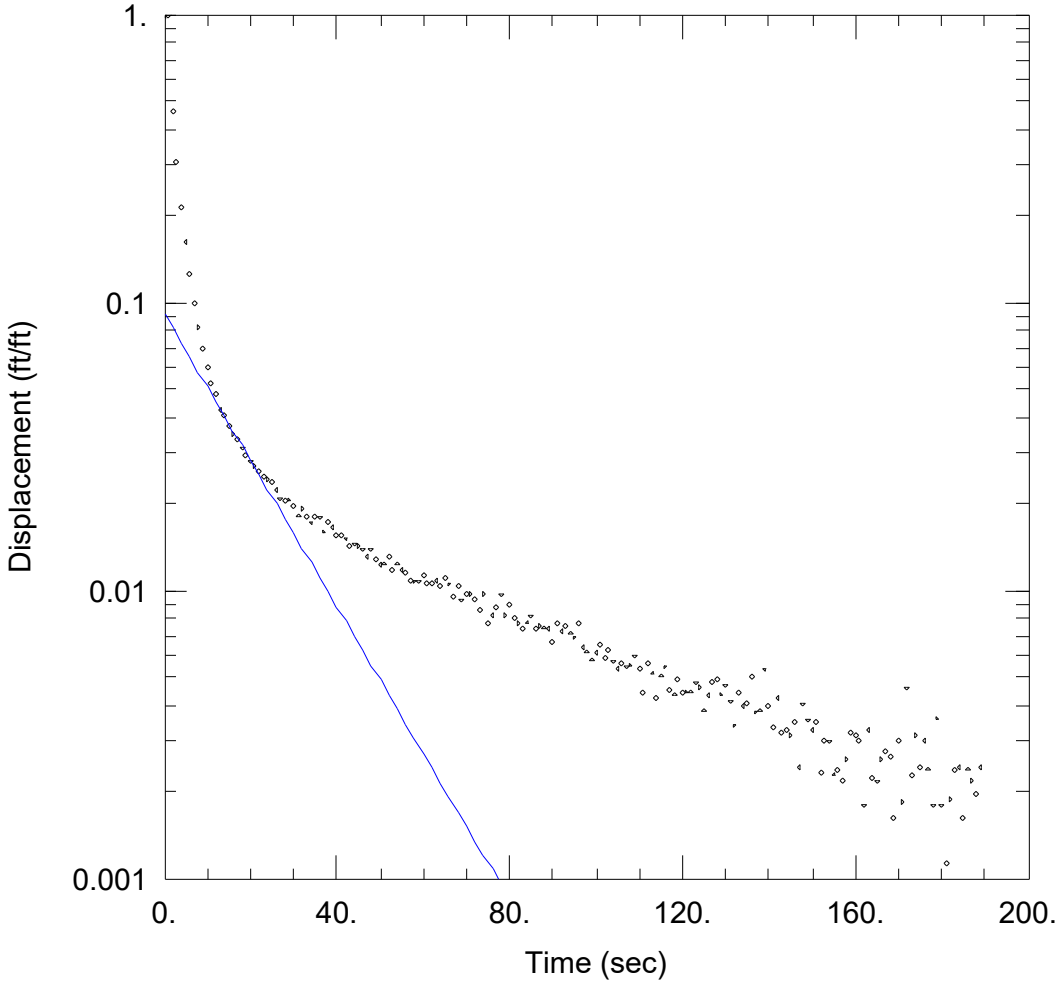
TABLE 1
HYDRAULIC CONDUCTIVITY
BRAMLETTE ROAD SITE
400 EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA
VCC 16-5857-RP

Well ID	Slug Test	Slug Test Number	Hydraulic Conductivity (cm/sec)		Hydraulic Conductivity (ft/day)	
			Measured	Geometric Mean	Measured	Geometric Mean
MW-30S [1]	Slug Out	Test 1	8.01E-03	5.74E-03	2.27E+01	1.63E+01
		Test 2	4.12E-03		1.17E+01	
MW-31S [1]	Slug Out	Test 1	4.08E-03	2.43E-03	1.16E+01	6.88E+00
		Test 2	1.45E-03		4.10E+00	
MW-31TZ [2]	Slug Out	Test 1	2.00E-04	1.94E-04	5.67E-01	5.50E-01
		Test 2	1.88E-04		5.32E-01	
		GEOMETRIC MEAN		1.39E-03		3.95E+00
		HIGHEST CONDUCTIVITY		8.01E-03		2.27E+01
		LOWEST CONDUCTIVITY		1.88E-04		5.32E-01

Note:

Prepared by: HJF Checked by: TDP

[1] Slug tests were analyzed using theBouwer-Rice mathmatical model.



WELL MW-30S, TEST 1

Data Set: P:\...\MW-30S_Test1.aqt
Date: 01/08/19 Time: 16:03:27

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

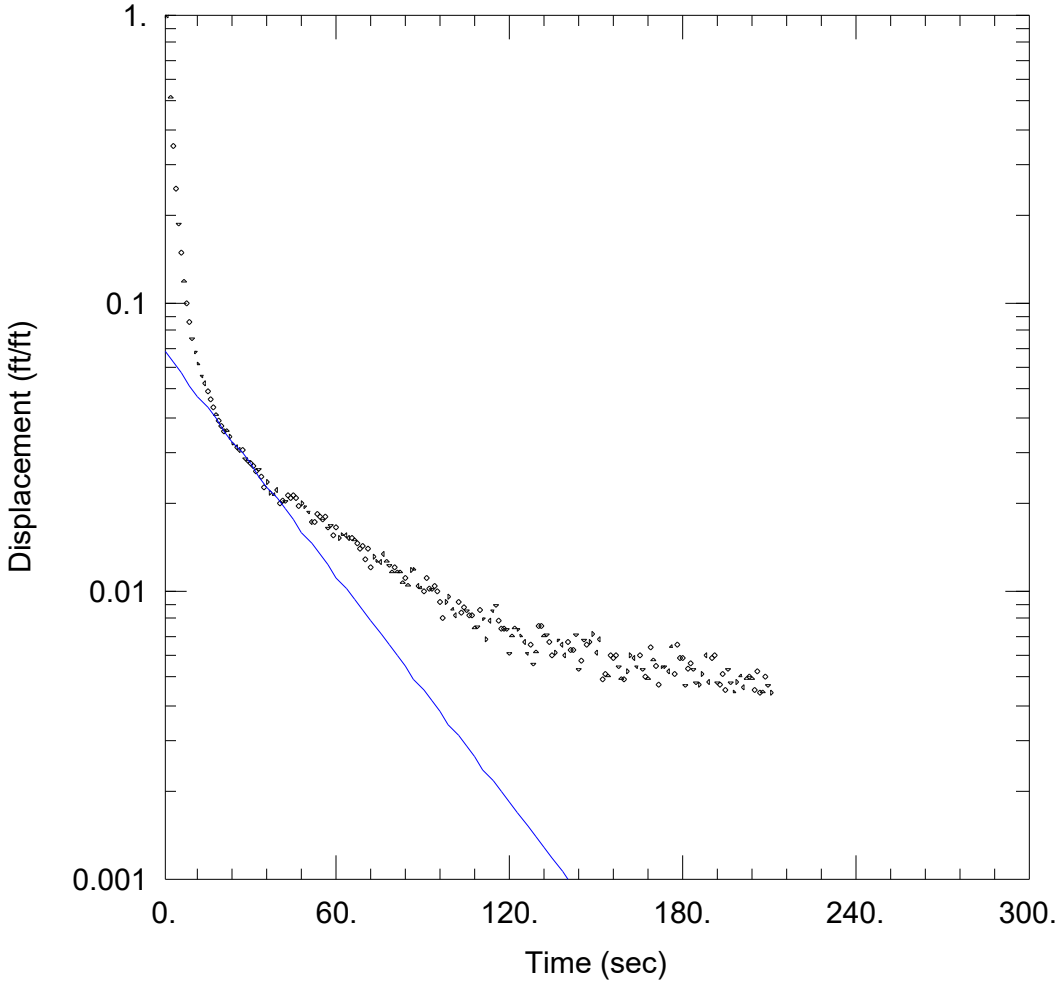
Saturated Thickness: 22.96 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-30S)

Initial Displacement: 2.902 ft
Total Well Penetration Depth: 8.96 ft
Casing Radius: 0.083 ft
Static Water Column Height: 8.96 ft
Screen Length: 8.96 ft
Well Radius: 0.344 ft
Gravel Pack Porosity: 0.32

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 0.00801 cm/sec y0 = 0.2659 ft



WELL MW-30S, TEST 2

Data Set: P:\...\MW-30S_Test2.aqt
Date: 01/08/19 Time: 16:04:56

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

Saturated Thickness: 22.96 ft Anisotropy Ratio (Kz/Kr): 1.

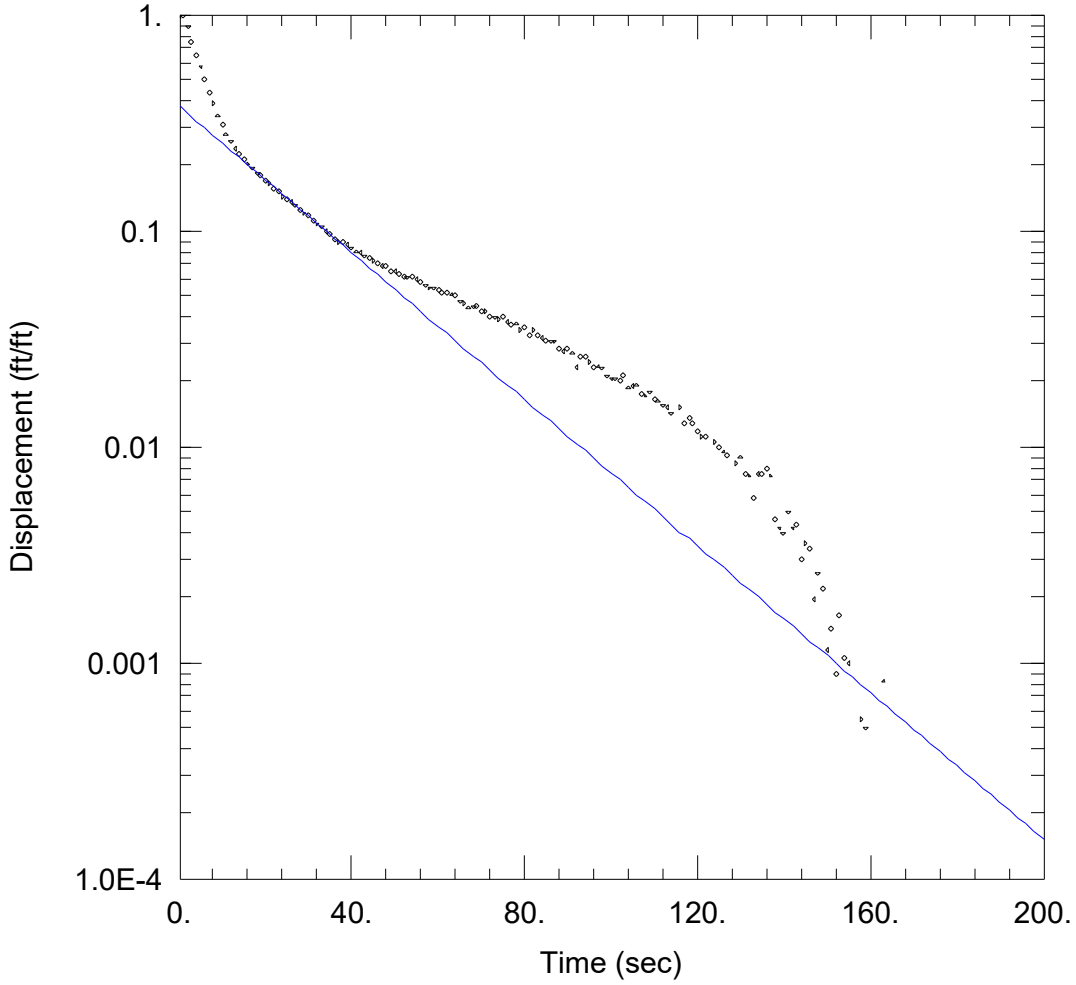
WELL DATA (MW-30S)

Initial Displacement: 2.628 ft
Total Well Penetration Depth: 8.96 ft
Casing Radius: 0.083 ft
Static Water Column Height: 8.96 ft
Screen Length: 8.96 ft
Well Radius: 0.344 ft
Gravel Pack Porosity: 0.32

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.004118 cm/sec y0 = 0.1788 ft



WELL MW-31S, TEST 1

Data Set: P:\...\MW-31S_Test1.aqt
Date: 01/08/19 Time: 16:10:50

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

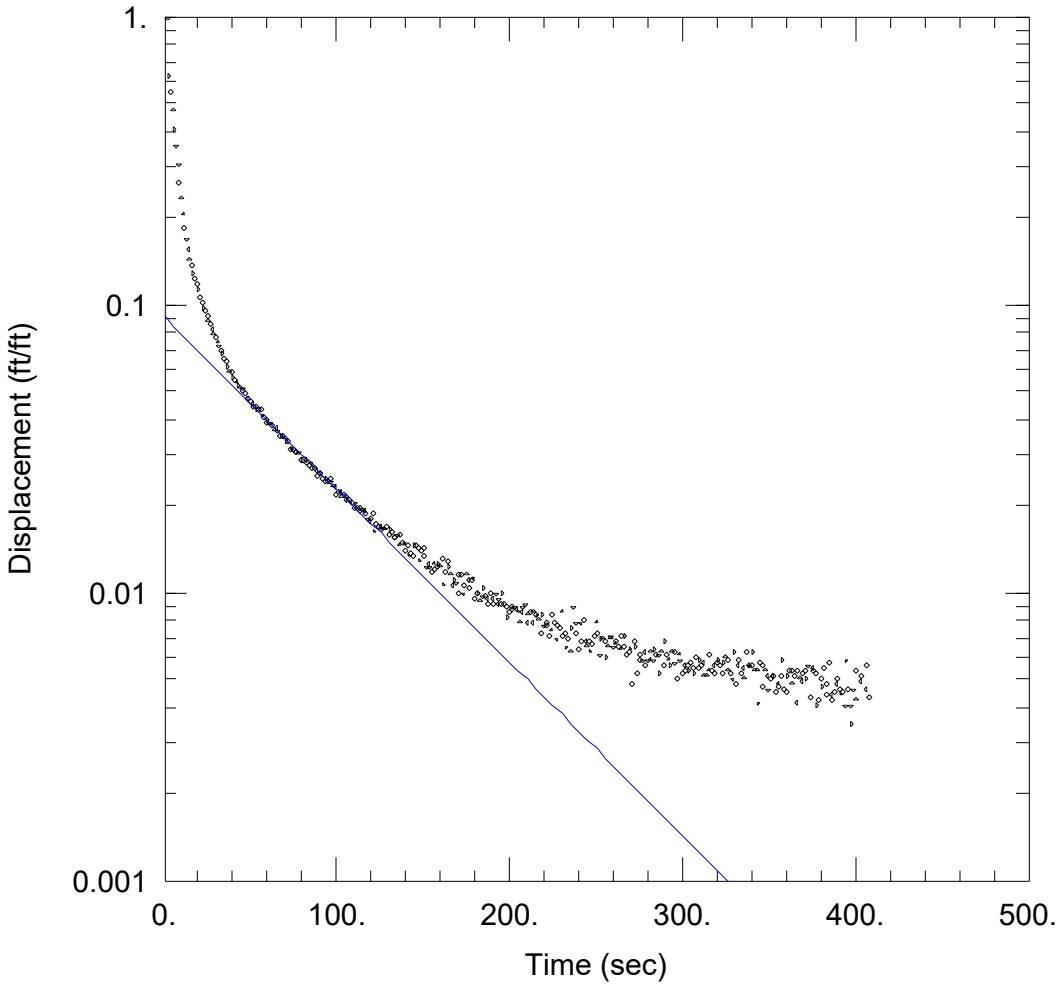
Saturated Thickness: 21.88 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-31S)

Initial Displacement: 1.811 ft
Total Well Penetration Depth: 7.88 ft
Casing Radius: 0.083 ft
Static Water Column Height: 7.88 ft
Screen Length: 7.88 ft
Well Radius: 0.276 ft
Gravel Pack Porosity: 0.32

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 0.004078 cm/sec y0 = 0.6834 ft



WELL MW-31S, TEST 2

Data Set: P:\...\MW-31S_Test2.aqt
Date: 01/08/19 Time: 16:03:59

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

Saturated Thickness: 22.83 ft Anisotropy Ratio (Kz/Kr): 1.

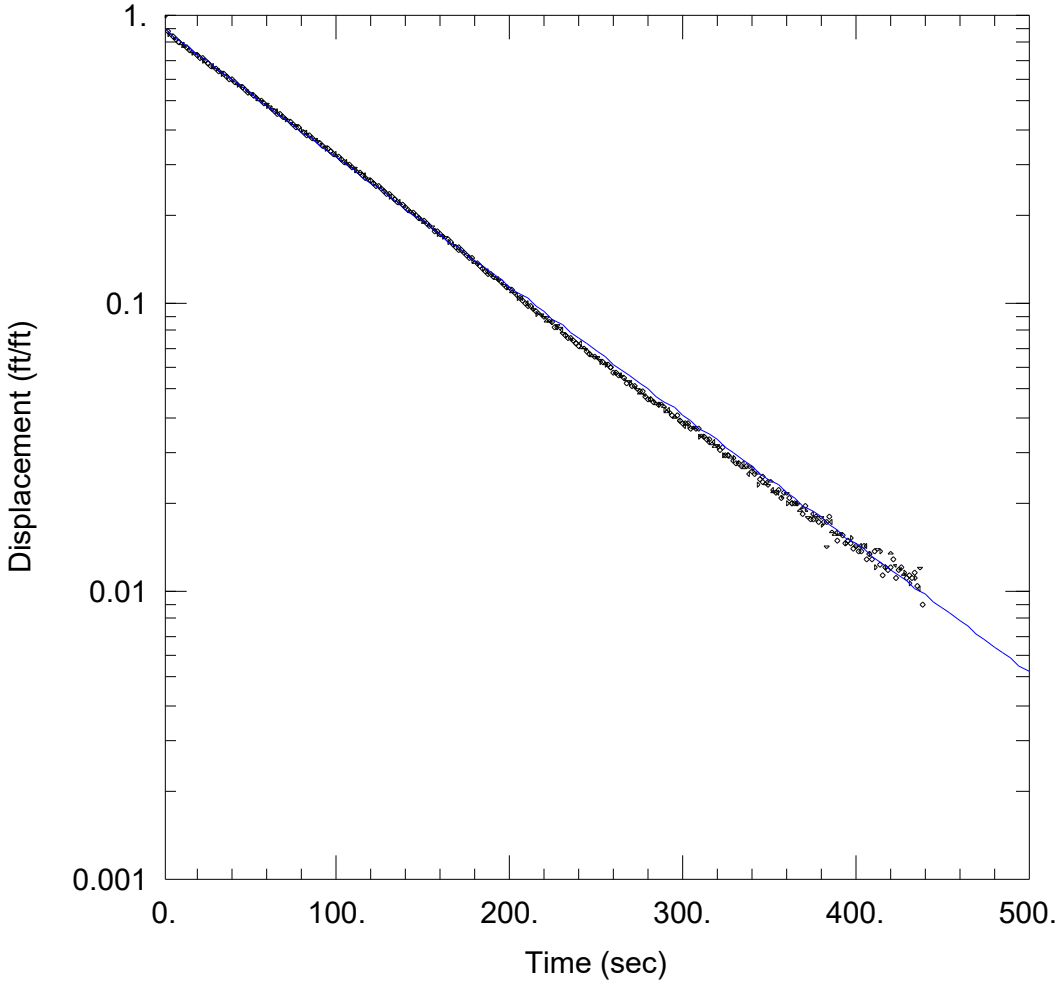
WELL DATA (MW-31S)

Initial Displacement: 3.097 ft
Total Well Penetration Depth: 7.83 ft
Casing Radius: 0.083 ft
Static Water Column Height: 7.83 ft
Screen Length: 7.83 ft
Well Radius: 0.276 ft
Gravel Pack Porosity: 0.32

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001446 cm/sec y0 = 0.2814 ft



WELL MW-31TZ, TEST 1

Data Set: P:\...\MW-31TZ_Test1.aqt
Date: 01/08/19 Time: 16:17:38

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

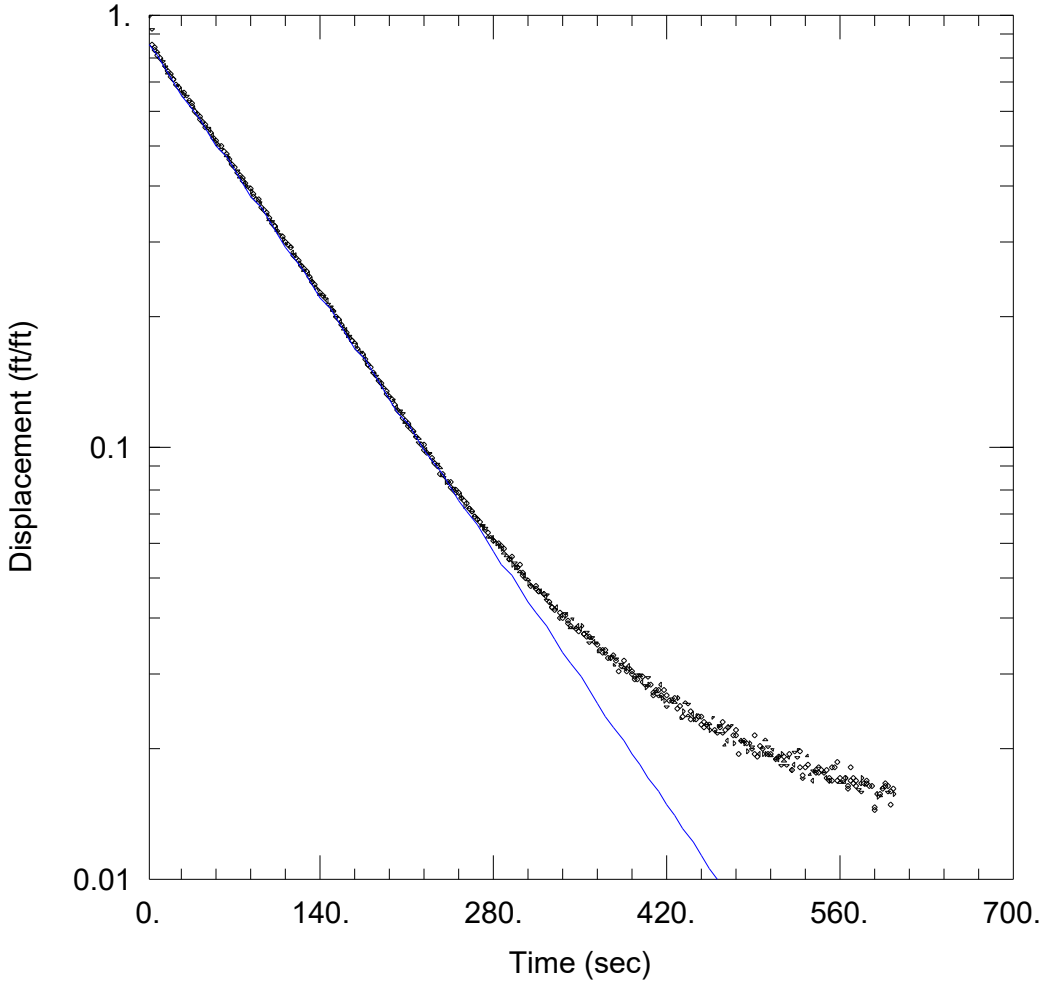
Saturated Thickness: 21.26 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-31TZ)

Initial Displacement: 2.639 ft
Total Well Penetration Depth: 26.26 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.26 ft
Screen Length: 10. ft
Well Radius: 0.276 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.0002001 cm/sec
y0 = 2.357 ft



WELL MW-31TZ, TEST 2

Data Set: P:\...\MW-31TZ_Test2.aqt
Date: 01/08/19 Time: 16:16:44

PROJECT INFORMATION

Company: SynTerra
Client: DEC Bramlette Road
Project: 1026.800
Location: Greenville, SC
Test Date: December 12, 2018

AQUIFER DATA

Saturated Thickness: 21.34 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-31TZ)

Initial Displacement: 2.637 ft
Total Well Penetration Depth: 26.34 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.34 ft
Screen Length: 10. ft
Well Radius: 0.276 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.0001878 cm/sec
y0 = 2.26 ft

ATTACHMENT F

Analytical Laboratory Reports

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

January 08, 2019

Program Manager
Duke Energy
13339 Hagers Ferry Road
Bldg. 7405 MG30A2
Huntersville, NC 28078

RE: Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Dear Program Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on December 13, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Program Manager, Duke Energy
Mike Mastbaum
Todd Plating, Synterra
Rick Powell
B. Russo
Heather Smith

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92410726001	**MW-30S**	Water	12/12/18 14:10	12/13/18 13:10
92410726002	**MW-30S DUP**	Water	12/12/18 14:10	12/13/18 13:10
92410726003	**MW-31S MS/MSD**	Water	12/12/18 11:53	12/13/18 13:10
92410726004	**MW-31 TZ**	Water	12/12/18 12:54	12/13/18 13:10
92410726005	**TRIP BLANK**	Water	12/12/18 12:50	12/13/18 13:10
92410726006	**EQB**	Water	12/12/18 14:55	12/13/18 13:10
92410726007	**FB 1**	Water	12/12/18 15:05	12/13/18 13:10

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SAMPLE ANALYTE COUNT

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92410726001	**MW-30S**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C
92410726002	**MW-30S DUP**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C
92410726003	**MW-31S MS/MSD**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C
92410726004	**MW-31 TZ**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C
92410726005	**TRIP BLANK**	EPA 8260B	GAW	62	PASI-C
92410726006	**EQB**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C
92410726007	**FB 1**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	CL	62	PASI-C

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92410726003	**MW-31S MS/MSD**					
EPA 8270D	Acenaphthene	2.8J	ug/L	10.0	12/18/18 16:48	
92410726004	**MW-31 TZ**					
EPA 8270D	2,4-Dinitrotoluene	5.3J	ug/L	10.0	12/18/18 17:16	
EPA 8260B	Naphthalene	0.38J	ug/L	1.0	12/20/18 15:36	
92410726006	**EQB**					
EPA 8260B	Acetone	18.6J	ug/L	25.0	12/20/18 14:14	
EPA 8260B	2-Butanone (MEK)	3.7J	ug/L	5.0	12/20/18 14:14	
EPA 8260B	2-Hexanone	0.58J	ug/L	5.0	12/20/18 14:14	
92410726007	**FB 1**					
EPA 8260B	Acetone	18.4J	ug/L	25.0	12/20/18 14:30	
EPA 8260B	2-Butanone (MEK)	3.6J	ug/L	5.0	12/20/18 14:30	
EPA 8260B	2-Hexanone	0.56J	ug/L	5.0	12/20/18 14:30	

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Org SC
Client: Duke Energy
Date: January 08, 2019

General Information:
6 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 447869

S0: Surrogate recovery outside laboratory control limits.
- MW-31S MS/MSD (Lab ID: 92410726003)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 447869

1g: Comment applie to all compounds outside control limits.
- LCS (Lab ID: 2453804)
  - Phenol

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Org SC
Client: Duke Energy
Date: January 08, 2019

Analyte Comments:

QC Batch: 447869

2g: Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits.

- LCS (Lab ID: 2453804)
  - Phenol

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Method: **EPA 8260B**
Description: 8260 MSV Low Level SC
Client: Duke Energy
Date: January 08, 2019

General Information:
7 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 448475

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2456445)
  - Chloromethane
  - Dichlorodifluoromethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 448278

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92410843011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2455475)
  - Trichlorofluoromethane

QC Batch: 448475

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92410726003

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2456446)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Method: **EPA 8260B**
Description: 8260 MSV Low Level SC
Client: Duke Energy
Date: January 08, 2019

QC Batch: 448475

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92410726003

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- Chloromethane
- Dichlorodifluoromethane

- MSD (Lab ID: 2456447)
  - Chloromethane
  - Dichlorodifluoromethane

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S **Lab ID: 92410726001** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 15:51	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 15:51	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 15:51	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 15:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 15:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 15:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 15:51	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 15:51	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 15:51	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 15:51	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 15:51	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 15:51	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 15:51	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 15:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 15:51	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 15:51	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 15:51	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 15:51	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 15:51	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 15:51	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 15:51	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 15:51	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 15:51	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 15:51	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 15:51	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 15:51	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S **Lab ID: 92410726001** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 15:51	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 15:51	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 15:51	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 15:51	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 15:51	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 15:51	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 15:51	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 15:51	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 15:51	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 15:51	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 15:51	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 15:51	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	46	%	21-110		1	12/15/18 17:28	12/18/18 15:51	4165-60-0	
2-Fluorobiphenyl (S)	49	%	27-110		1	12/15/18 17:28	12/18/18 15:51	321-60-8	
Terphenyl-d14 (S)	42	%	31-107		1	12/15/18 17:28	12/18/18 15:51	1718-51-0	
Phenol-d6 (S)	20	%	10-110		1	12/15/18 17:28	12/18/18 15:51	13127-88-3	
2-Fluorophenol (S)	27	%	12-110		1	12/15/18 17:28	12/18/18 15:51	367-12-4	
2,4,6-Tribromophenol (S)	70	%	27-110		1	12/15/18 17:28	12/18/18 15:51	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/20/18 14:47	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 14:47	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:47	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 14:47	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 14:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 14:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 14:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/20/18 14:47	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 14:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 14:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 14:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 14:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 14:47	74-87-3	L1
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 14:47	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:47	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S **Lab ID: 92410726001** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 14:47	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 14:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 14:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:47	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:47	75-71-8	L1
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 14:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 14:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 14:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 14:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 14:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 14:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 14:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 14:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 14:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 14:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 14:47	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 14:47	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 14:47	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/20/18 14:47	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:47	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 14:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 14:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 14:47	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/20/18 14:47	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 14:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 14:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 14:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 14:47	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 14:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 14:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 14:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 14:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 14:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 14:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 14:47	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 14:47	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 14:47	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 14:47	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 14:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 14:47	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		12/20/18 14:47	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S **Lab ID: 92410726001** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	112	%	70-130		1		12/20/18 14:47	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		12/20/18 14:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S DUP **Lab ID: 92410726002** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 16:19	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:19	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:19	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:19	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 16:19	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 16:19	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 16:19	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 16:19	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 16:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:19	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:19	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 16:19	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 16:19	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 16:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 16:19	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:19	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:19	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 16:19	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 16:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:19	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S DUP **Lab ID: 92410726002** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 16:19	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 16:19	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 16:19	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 16:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 16:19	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 16:19	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:19	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 16:19	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:19	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	36	%	21-110		1	12/15/18 17:28	12/18/18 16:19	4165-60-0	
2-Fluorobiphenyl (S)	37	%	27-110		1	12/15/18 17:28	12/18/18 16:19	321-60-8	
Terphenyl-d14 (S)	35	%	31-107		1	12/15/18 17:28	12/18/18 16:19	1718-51-0	
Phenol-d6 (S)	13	%	10-110		1	12/15/18 17:28	12/18/18 16:19	13127-88-3	
2-Fluorophenol (S)	19	%	12-110		1	12/15/18 17:28	12/18/18 16:19	367-12-4	
2,4,6-Tribromophenol (S)	55	%	27-110		1	12/15/18 17:28	12/18/18 16:19	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/20/18 15:03	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 15:03	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:03	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 15:03	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 15:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 15:03	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 15:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/20/18 15:03	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 15:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 15:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 15:03	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 15:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 15:03	74-87-3	L1
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 15:03	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:03	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S DUP **Lab ID: 92410726002** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 15:03	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:03	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 15:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 15:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:03	75-71-8	L1
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 15:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 15:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 15:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 15:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 15:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 15:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 15:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 15:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 15:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 15:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 15:03	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 15:03	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 15:03	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/20/18 15:03	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:03	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 15:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 15:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 15:03	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/20/18 15:03	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 15:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 15:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 15:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 15:03	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 15:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 15:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 15:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 15:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 15:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 15:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 15:03	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 15:03	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 15:03	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 15:03	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 15:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 15:03	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		12/20/18 15:03	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-30S DUP **Lab ID: 92410726002** Collected: 12/12/18 14:10 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		12/20/18 15:03	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		12/20/18 15:03	2037-26-5	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31S MS/MSD **Lab ID: 92410726003** Collected: 12/12/18 11:53 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**2.8J**	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 16:48	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:48	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 16:48	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 16:48	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 16:48	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 16:48	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 16:48	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:48	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 16:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:48	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:48	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 16:48	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:48	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 16:48	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 16:48	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 16:48	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:48	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:48	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 16:48	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 16:48	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 16:48	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31S MS/MSD **Lab ID: 92410726003** Collected: 12/12/18 11:53 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 16:48	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 16:48	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 16:48	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 16:48	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 16:48	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 16:48	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 16:48	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 16:48	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 16:48	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 16:48	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 16:48	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 16:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	44	%	21-110		1	12/15/18 17:28	12/18/18 16:48	4165-60-0	
2-Fluorobiphenyl (S)	45	%	27-110		1	12/15/18 17:28	12/18/18 16:48	321-60-8	
Terphenyl-d14 (S)	29	%	31-107		1	12/15/18 17:28	12/18/18 16:48	1718-51-0	S0
Phenol-d6 (S)	17	%	10-110		1	12/15/18 17:28	12/18/18 16:48	13127-88-3	
2-Fluorophenol (S)	24	%	12-110		1	12/15/18 17:28	12/18/18 16:48	367-12-4	
2,4,6-Tribromophenol (S)	67	%	27-110		1	12/15/18 17:28	12/18/18 16:48	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/20/18 15:20	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 15:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 15:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 15:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 15:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 15:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/20/18 15:20	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 15:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 15:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 15:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 15:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 15:20	74-87-3	L1,M0
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 15:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:20	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31S MS/MSD **Lab ID: 92410726003** Collected: 12/12/18 11:53 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 15:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:20	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 15:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 15:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:20	75-71-8	L1,M0
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 15:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 15:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 15:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 15:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 15:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 15:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 15:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 15:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 15:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 15:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 15:20	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 15:20	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 15:20	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/20/18 15:20	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:20	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 15:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 15:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 15:20	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/20/18 15:20	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 15:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 15:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 15:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 15:20	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 15:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 15:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 15:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 15:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 15:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 15:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 15:20	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 15:20	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 15:20	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 15:20	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 15:20	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 15:20	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		12/20/18 15:20	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31S MS/MSD **Lab ID: 92410726003** Collected: 12/12/18 11:53 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		12/20/18 15:20	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		12/20/18 15:20	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31 TZ **Lab ID: 92410726004** Collected: 12/12/18 12:54 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 17:16	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:16	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:16	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:16	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:16	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:16	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:16	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 17:16	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 17:16	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 17:16	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 17:16	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 17:16	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:16	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:16	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:16	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:16	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 17:16	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:16	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 17:16	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 17:16	51-28-5	
2,4-Dinitrotoluene	**5.3J**	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 17:16	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:16	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:16	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 17:16	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 17:16	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:16	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31 TZ **Lab ID: 92410726004** Collected: 12/12/18 12:54 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 17:16	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 17:16	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 17:16	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 17:16	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:16	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 17:16	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 17:16	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:16	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 17:16	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:16	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:16	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:16	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	47	%	21-110		1	12/15/18 17:28	12/18/18 17:16	4165-60-0	
2-Fluorobiphenyl (S)	49	%	27-110		1	12/15/18 17:28	12/18/18 17:16	321-60-8	
Terphenyl-d14 (S)	32	%	31-107		1	12/15/18 17:28	12/18/18 17:16	1718-51-0	
Phenol-d6 (S)	18	%	10-110		1	12/15/18 17:28	12/18/18 17:16	13127-88-3	
2-Fluorophenol (S)	26	%	12-110		1	12/15/18 17:28	12/18/18 17:16	367-12-4	
2,4,6-Tribromophenol (S)	69	%	27-110		1	12/15/18 17:28	12/18/18 17:16	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/20/18 15:36	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 15:36	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 15:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 15:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 15:36	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 15:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/20/18 15:36	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 15:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 15:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 15:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 15:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 15:36	74-87-3	L1
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 15:36	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:36	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31 TZ **Lab ID: 92410726004** Collected: 12/12/18 12:54 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 15:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 15:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 15:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 15:36	75-71-8	L1
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 15:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 15:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 15:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 15:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 15:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 15:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 15:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 15:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 15:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 15:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 15:36	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 15:36	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 15:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 15:36	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/20/18 15:36	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 15:36	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 15:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 15:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 15:36	1634-04-4	
Naphthalene	**0.38J**	ug/L	1.0	0.24	1		12/20/18 15:36	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 15:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 15:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 15:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 15:36	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 15:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 15:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 15:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 15:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 15:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 15:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 15:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 15:36	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 15:36	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 15:36	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 15:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 15:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 15:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		12/20/18 15:36	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: MW-31 TZ **Lab ID: 92410726004** Collected: 12/12/18 12:54 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		12/20/18 15:36	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		12/20/18 15:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: TRIP BLANK **Lab ID: 92410726005** Collected: 12/12/18 12:50 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/18/18 18:18	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/18/18 18:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/18/18 18:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/18/18 18:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/18/18 18:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/18/18 18:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/18/18 18:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/18/18 18:18	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/18/18 18:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/18/18 18:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/18/18 18:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/18/18 18:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/18/18 18:18	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/18/18 18:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/18/18 18:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/18/18 18:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/18/18 18:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/18/18 18:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/18/18 18:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/18/18 18:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/18/18 18:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/18/18 18:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/18/18 18:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/18/18 18:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/18/18 18:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/18/18 18:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/18/18 18:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/18/18 18:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/18/18 18:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/18/18 18:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/18/18 18:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/18/18 18:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/18/18 18:18	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/18/18 18:18	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/18/18 18:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/18/18 18:18	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/18/18 18:18	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/18/18 18:18	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/18/18 18:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/18/18 18:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/18/18 18:18	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/18/18 18:18	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/18/18 18:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/18/18 18:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/18/18 18:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/18/18 18:18	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: TRIP BLANK **Lab ID: 92410726005** Collected: 12/12/18 12:50 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Toluene	ND	ug/L	1.0	0.26	1		12/18/18 18:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/18/18 18:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/18/18 18:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/18/18 18:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/18/18 18:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/18/18 18:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/18/18 18:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/18/18 18:18	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/18/18 18:18	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/18/18 18:18	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/18/18 18:18	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/18/18 18:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/18/18 18:18	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		12/18/18 18:18	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		12/18/18 18:18	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/18/18 18:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: EQB **Lab ID: 92410726006** Collected: 12/12/18 14:55 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 17:44	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:44	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:44	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:44	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 17:44	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 17:44	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 17:44	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 17:44	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 17:44	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:44	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 17:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:44	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:44	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 17:44	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:44	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 17:44	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 17:44	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 17:44	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:44	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:44	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 17:44	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 17:44	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 17:44	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: EQB **Lab ID: 92410726006** Collected: 12/12/18 14:55 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 17:44	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 17:44	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 17:44	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 17:44	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 17:44	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 17:44	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 17:44	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 17:44	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 17:44	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 17:44	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 17:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 17:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	49	%	21-110		1	12/15/18 17:28	12/18/18 17:44	4165-60-0	
2-Fluorobiphenyl (S)	50	%	27-110		1	12/15/18 17:28	12/18/18 17:44	321-60-8	
Terphenyl-d14 (S)	46	%	31-107		1	12/15/18 17:28	12/18/18 17:44	1718-51-0	
Phenol-d6 (S)	18	%	10-110		1	12/15/18 17:28	12/18/18 17:44	13127-88-3	
2-Fluorophenol (S)	26	%	12-110		1	12/15/18 17:28	12/18/18 17:44	367-12-4	
2,4,6-Tribromophenol (S)	61	%	27-110		1	12/15/18 17:28	12/18/18 17:44	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	**18.6J**	ug/L	25.0	10.0	1		12/20/18 14:14	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 14:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 14:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 14:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 14:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 14:14	74-83-9	
2-Butanone (MEK)	**3.7J**	ug/L	5.0	0.96	1		12/20/18 14:14	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 14:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 14:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 14:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 14:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 14:14	74-87-3	L1
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 14:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:14	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: EQB **Lab ID: 92410726006** Collected: 12/12/18 14:55 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 14:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:14	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 14:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 14:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:14	75-71-8	L1
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 14:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 14:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 14:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 14:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 14:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 14:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 14:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 14:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 14:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 14:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 14:14	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 14:14	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 14:14	87-68-3	
2-Hexanone	**0.58J**	ug/L	5.0	0.46	1		12/20/18 14:14	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:14	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 14:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 14:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 14:14	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/20/18 14:14	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 14:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 14:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 14:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 14:14	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 14:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 14:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 14:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 14:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 14:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 14:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 14:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 14:14	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 14:14	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 14:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 14:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 14:14	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		12/20/18 14:14	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: EQB **Lab ID: 92410726006** Collected: 12/12/18 14:55 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		12/20/18 14:14	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		12/20/18 14:14	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: FB 1 **Lab ID: 92410726007** Collected: 12/12/18 15:05 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/15/18 17:28	12/18/18 18:12	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 18:12	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 18:12	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 18:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 18:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 18:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 18:12	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/15/18 17:28	12/18/18 18:12	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/15/18 17:28	12/18/18 18:12	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/15/18 17:28	12/18/18 18:12	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/15/18 17:28	12/18/18 18:12	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/15/18 17:28	12/18/18 18:12	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 18:12	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/15/18 17:28	12/18/18 18:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 18:12	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 18:12	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/15/18 17:28	12/18/18 18:12	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 18:12	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/15/18 17:28	12/18/18 18:12	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/15/18 17:28	12/18/18 18:12	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/15/18 17:28	12/18/18 18:12	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 18:12	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 18:12	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 18:12	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 18:12	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/15/18 17:28	12/18/18 18:12	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: FB 1 **Lab ID: 92410726007** Collected: 12/12/18 15:05 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/15/18 17:28	12/18/18 18:12	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/15/18 17:28	12/18/18 18:12	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/15/18 17:28	12/18/18 18:12	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/15/18 17:28	12/18/18 18:12	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/15/18 17:28	12/18/18 18:12	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/15/18 17:28	12/18/18 18:12	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/15/18 17:28	12/18/18 18:12	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/15/18 17:28	12/18/18 18:12	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/15/18 17:28	12/18/18 18:12	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/15/18 17:28	12/18/18 18:12	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/15/18 17:28	12/18/18 18:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/15/18 17:28	12/18/18 18:12	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%	21-110		1	12/15/18 17:28	12/18/18 18:12	4165-60-0	
2-Fluorobiphenyl (S)	69	%	27-110		1	12/15/18 17:28	12/18/18 18:12	321-60-8	
Terphenyl-d14 (S)	55	%	31-107		1	12/15/18 17:28	12/18/18 18:12	1718-51-0	
Phenol-d6 (S)	26	%	10-110		1	12/15/18 17:28	12/18/18 18:12	13127-88-3	
2-Fluorophenol (S)	39	%	12-110		1	12/15/18 17:28	12/18/18 18:12	367-12-4	
2,4,6-Tribromophenol (S)	77	%	27-110		1	12/15/18 17:28	12/18/18 18:12	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	**18.4J**	ug/L	25.0	10.0	1		12/20/18 14:30	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/20/18 14:30	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:30	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/20/18 14:30	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/20/18 14:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/20/18 14:30	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/20/18 14:30	74-83-9	
2-Butanone (MEK)	**3.6J**	ug/L	5.0	0.96	1		12/20/18 14:30	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/20/18 14:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/20/18 14:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/20/18 14:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/20/18 14:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/20/18 14:30	74-87-3	L1
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/20/18 14:30	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:30	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: FB 1 **Lab ID: 92410726007** Collected: 12/12/18 15:05 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/20/18 14:30	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/20/18 14:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/20/18 14:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:30	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/20/18 14:30	75-71-8	L1
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/20/18 14:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/20/18 14:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/20/18 14:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/20/18 14:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/20/18 14:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/20/18 14:30	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/20/18 14:30	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/20/18 14:30	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/20/18 14:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/20/18 14:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/20/18 14:30	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/20/18 14:30	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/20/18 14:30	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/20/18 14:30	87-68-3	
2-Hexanone	**0.56J**	ug/L	5.0	0.46	1		12/20/18 14:30	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/20/18 14:30	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/20/18 14:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/20/18 14:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/20/18 14:30	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/20/18 14:30	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/20/18 14:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/20/18 14:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/20/18 14:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/20/18 14:30	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/20/18 14:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/20/18 14:30	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/20/18 14:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/20/18 14:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/20/18 14:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/20/18 14:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/20/18 14:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/20/18 14:30	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/20/18 14:30	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/20/18 14:30	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/20/18 14:30	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/20/18 14:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/20/18 14:30	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/20/18 14:30	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Sample: FB 1 **Lab ID: 92410726007** Collected: 12/12/18 15:05 Received: 12/13/18 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		12/20/18 14:30	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		12/20/18 14:30	2037-26-5	

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

QC Batch: 448278 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 92410726005

METHOD BLANK: 2455472 Matrix: Water
Associated Lab Samples: 92410726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.33	12/18/18 12:07	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.48	12/18/18 12:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.40	12/18/18 12:07	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.29	12/18/18 12:07	
1,1-Dichloroethane	ug/L	ND	1.0	0.32	12/18/18 12:07	
1,1-Dichloroethene	ug/L	ND	1.0	0.56	12/18/18 12:07	
1,1-Dichloropropene	ug/L	ND	1.0	0.49	12/18/18 12:07	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.33	12/18/18 12:07	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.41	12/18/18 12:07	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.35	12/18/18 12:07	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	2.0	12/18/18 12:07	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.30	12/18/18 12:07	
1,2-Dichloroethane	ug/L	ND	1.0	0.24	12/18/18 12:07	
1,2-Dichloropropane	ug/L	ND	1.0	0.27	12/18/18 12:07	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.24	12/18/18 12:07	
1,3-Dichloropropane	ug/L	ND	1.0	0.28	12/18/18 12:07	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.33	12/18/18 12:07	
2,2-Dichloropropane	ug/L	ND	1.0	0.13	12/18/18 12:07	
2-Butanone (MEK)	ug/L	ND	5.0	0.96	12/18/18 12:07	
2-Chlorotoluene	ug/L	ND	1.0	0.35	12/18/18 12:07	
2-Hexanone	ug/L	ND	5.0	0.46	12/18/18 12:07	
4-Chlorotoluene	ug/L	ND	1.0	0.31	12/18/18 12:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	0.33	12/18/18 12:07	
Acetone	ug/L	ND	25.0	10.0	12/18/18 12:07	
Benzene	ug/L	ND	1.0	0.25	12/18/18 12:07	
Bromobenzene	ug/L	ND	1.0	0.30	12/18/18 12:07	
Bromochloromethane	ug/L	ND	1.0	0.17	12/18/18 12:07	
Bromodichloromethane	ug/L	ND	1.0	0.18	12/18/18 12:07	
Bromoform	ug/L	ND	1.0	0.26	12/18/18 12:07	
Bromomethane	ug/L	ND	5.0	0.29	12/18/18 12:07	
Carbon tetrachloride	ug/L	ND	1.0	0.25	12/18/18 12:07	
Chlorobenzene	ug/L	ND	1.0	0.23	12/18/18 12:07	
Chloroethane	ug/L	ND	1.0	0.54	12/18/18 12:07	
Chloroform	ug/L	0.21J	1.0	0.14	12/18/18 12:07	
Chloromethane	ug/L	ND	1.0	0.11	12/18/18 12:07	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.19	12/18/18 12:07	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.13	12/18/18 12:07	
Dibromochloromethane	ug/L	ND	1.0	0.21	12/18/18 12:07	
Dibromomethane	ug/L	ND	1.0	0.21	12/18/18 12:07	
Dichlorodifluoromethane	ug/L	ND	1.0	0.21	12/18/18 12:07	
Diisopropyl ether	ug/L	ND	1.0	0.12	12/18/18 12:07	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

METHOD BLANK: 2455472 Matrix: Water
Associated Lab Samples: 92410726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	0.30	12/18/18 12:07	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.71	12/18/18 12:07	
m&p-Xylene	ug/L	ND	2.0	0.66	12/18/18 12:07	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.21	12/18/18 12:07	
Methylene Chloride	ug/L	ND	2.0	0.97	12/18/18 12:07	
Naphthalene	ug/L	0.28J	1.0	0.24	12/18/18 12:07	
o-Xylene	ug/L	ND	1.0	0.23	12/18/18 12:07	
p-Isopropyltoluene	ug/L	ND	1.0	0.31	12/18/18 12:07	
Styrene	ug/L	ND	1.0	0.26	12/18/18 12:07	
Tetrachloroethene	ug/L	ND	1.0	0.46	12/18/18 12:07	
Toluene	ug/L	ND	1.0	0.26	12/18/18 12:07	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.49	12/18/18 12:07	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.26	12/18/18 12:07	
Trichloroethene	ug/L	ND	1.0	0.47	12/18/18 12:07	
Trichlorofluoromethane	ug/L	ND	1.0	0.20	12/18/18 12:07	
Vinyl acetate	ug/L	ND	2.0	0.35	12/18/18 12:07	
Vinyl chloride	ug/L	ND	1.0	0.62	12/18/18 12:07	
Xylene (Total)	ug/L	ND	1.0	1.0	12/18/18 12:07	
1,2-Dichloroethane-d4 (S)	%	109	70-130		12/18/18 12:07	
4-Bromofluorobenzene (S)	%	98	70-130		12/18/18 12:07	
Toluene-d8 (S)	%	102	70-130		12/18/18 12:07	

LABORATORY CONTROL SAMPLE: 2455473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.2	98	70-130	
1,1,1-Trichloroethane	ug/L	50	50.6	101	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.1	94	70-130	
1,1,2-Trichloroethane	ug/L	50	48.2	96	70-130	
1,1-Dichloroethane	ug/L	50	50.8	102	70-130	
1,1-Dichloroethene	ug/L	50	52.6	105	70-130	
1,1-Dichloropropene	ug/L	50	48.4	97	70-130	
1,2,3-Trichlorobenzene	ug/L	50	50.4	101	70-130	
1,2,3-Trichloropropane	ug/L	50	49.6	99	70-130	
1,2,4-Trichlorobenzene	ug/L	50	49.4	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	47.3	95	70-130	
1,2-Dichlorobenzene	ug/L	50	48.1	96	70-130	
1,2-Dichloroethane	ug/L	50	50.8	102	70-130	
1,2-Dichloropropane	ug/L	50	49.1	98	70-130	
1,3-Dichlorobenzene	ug/L	50	48.2	96	70-130	
1,3-Dichloropropane	ug/L	50	49.6	99	70-130	
1,4-Dichlorobenzene	ug/L	50	47.4	95	70-130	
2,2-Dichloropropane	ug/L	50	51.2	102	70-130	
2-Butanone (MEK)	ug/L	100	101	101	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

LABORATORY CONTROL SAMPLE: 2455473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	50	49.4	99	70-130	
2-Hexanone	ug/L	100	98.4	98	70-130	
4-Chlorotoluene	ug/L	50	48.9	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.8	97	70-130	
Acetone	ug/L	100	104	104	70-130	
Benzene	ug/L	50	50.2	100	70-130	
Bromobenzene	ug/L	50	48.4	97	70-130	
Bromochloromethane	ug/L	50	48.0	96	70-130	
Bromodichloromethane	ug/L	50	48.2	96	70-130	
Bromoform	ug/L	50	44.9	90	70-130	
Bromomethane	ug/L	50	53.1	106	70-130	
Carbon tetrachloride	ug/L	50	48.9	98	70-130	
Chlorobenzene	ug/L	50	48.5	97	70-130	
Chloroethane	ug/L	50	40.1	80	70-130	
Chloroform	ug/L	50	48.0	96	70-130	
Chloromethane	ug/L	50	53.0	106	70-130	
cis-1,2-Dichloroethene	ug/L	50	52.1	104	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.6	99	70-130	
Dibromochloromethane	ug/L	50	47.3	95	70-130	
Dibromomethane	ug/L	50	46.6	93	70-130	
Dichlorodifluoromethane	ug/L	50	51.5	103	70-130	
Diisopropyl ether	ug/L	50	52.7	105	70-130	
Ethylbenzene	ug/L	50	49.4	99	70-130	
Hexachloro-1,3-butadiene	ug/L	50	47.7	95	70-130	
m&p-Xylene	ug/L	100	96.7	97	70-130	
Methyl-tert-butyl ether	ug/L	50	49.7	99	70-130	
Methylene Chloride	ug/L	50	54.2	108	70-130	
Naphthalene	ug/L	50	48.4	97	70-130	
o-Xylene	ug/L	50	47.5	95	70-130	
p-Isopropyltoluene	ug/L	50	48.2	96	70-130	
Styrene	ug/L	50	48.0	96	70-130	
Tetrachloroethene	ug/L	50	45.8	92	70-130	
Toluene	ug/L	50	47.6	95	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.3	105	70-130	
trans-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Trichloroethene	ug/L	50	49.1	98	70-130	
Trichlorofluoromethane	ug/L	50	57.3	115	70-130	
Vinyl acetate	ug/L	100	109	109	70-130	
Vinyl chloride	ug/L	50	53.4	107	70-130	
Xylene (Total)	ug/L	150	144	96	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			97	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE SAMPLE: 2455475

Parameter	Units	92410843011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20.4	102	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	22.1	110	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.3	102	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	21.2	106	70-130	
1,1-Dichloroethane	ug/L	ND	20	22.7	113	70-130	
1,1-Dichloroethene	ug/L	ND	20	24.1	120	70-130	
1,1-Dichloropropene	ug/L	ND	20	21.4	107	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	20.2	101	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	21.9	109	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.5	102	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	18.9	95	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	20.6	103	70-130	
1,2-Dichloroethane	ug/L	ND	20	22.6	113	70-130	
1,2-Dichloropropane	ug/L	ND	20	22.3	112	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	20.1	101	70-130	
1,3-Dichloropropane	ug/L	ND	20	21.5	107	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	20.1	101	70-130	
2,2-Dichloropropane	ug/L	ND	20	19.7	98	70-130	
2-Butanone (MEK)	ug/L	ND	40	47.2	118	70-130	
2-Chlorotoluene	ug/L	ND	20	20.9	104	70-130	
2-Hexanone	ug/L	ND	40	44.3	111	70-130	
4-Chlorotoluene	ug/L	ND	20	21.1	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	46.4	116	70-130	
Acetone	ug/L	ND	40	51.7	129	70-130	
Benzene	ug/L	ND	20	22.4	112	70-130	
Bromobenzene	ug/L	ND	20	20.8	104	70-130	
Bromochloromethane	ug/L	ND	20	21.5	107	70-130	
Bromodichloromethane	ug/L	ND	20	21.1	106	70-130	
Bromoform	ug/L	ND	20	17.5	88	70-130	
Bromomethane	ug/L	ND	20	14.3	71	70-130	
Carbon tetrachloride	ug/L	ND	20	21.1	106	70-130	
Chlorobenzene	ug/L	ND	20	21.0	105	70-130	
Chloroethane	ug/L	ND	20	22.8	114	70-130	
Chloroform	ug/L	ND	20	22.6	113	70-130	
Chloromethane	ug/L	ND	20	21.1	106	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	23.4	117	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	21.1	106	70-130	
Dibromochloromethane	ug/L	ND	20	19.1	96	70-130	
Dibromomethane	ug/L	ND	20	20.7	103	70-130	
Dichlorodifluoromethane	ug/L	ND	20	16.1	80	70-130	
Diisopropyl ether	ug/L	ND	20	23.3	116	70-130	
Ethylbenzene	ug/L	ND	20	21.9	110	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	19.7	98	70-130	
m&p-Xylene	ug/L	ND	40	43.1	108	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	22.4	112	70-130	
Methylene Chloride	ug/L	ND	20	23.4	117	70-130	
Naphthalene	ug/L	ND	20	22.0	110	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE SAMPLE: 2455475

Parameter	Units	92410843011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	ND	20	21.2	106	70-130	
p-Isopropyltoluene	ug/L	ND	20	20.7	104	70-130	
Styrene	ug/L	ND	20	20.3	102	70-130	
Tetrachloroethene	ug/L	ND	20	20.7	103	70-130	
Toluene	ug/L	ND	20	22.2	111	70-130	
trans-1,2-Dichloroethene	ug/L	ND	20	23.3	117	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	21.0	105	70-130	
Trichloroethene	ug/L	ND	20	21.6	108	70-130	
Trichlorofluoromethane	ug/L	ND	20	26.3	132	70-130	M1
Vinyl acetate	ug/L	ND	40	41.8	105	70-130	
Vinyl chloride	ug/L	ND	20	22.4	112	70-130	
Xylene (Total)	ug/L	ND	60	64.3	107	70-130	
1,2-Dichloroethane-d4 (S)	%				107	70-130	
4-Bromofluorobenzene (S)	%				98	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 2455474

Parameter	Units	92410843010 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	1.0J	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	4.2J	5.1		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	13.0J	17.3J		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

SAMPLE DUPLICATE: 2455474

Parameter	Units	92410843010 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	1.7		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	108	109	1		
4-Bromofluorobenzene (S)	%	99	99	0		
Toluene-d8 (S)	%	102	99	3		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

QC Batch: 448475 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

METHOD BLANK: 2456444 Matrix: Water
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.33	12/20/18 11:47	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.48	12/20/18 11:47	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.40	12/20/18 11:47	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.29	12/20/18 11:47	
1,1-Dichloroethane	ug/L	ND	1.0	0.32	12/20/18 11:47	
1,1-Dichloroethene	ug/L	ND	1.0	0.56	12/20/18 11:47	
1,1-Dichloropropene	ug/L	ND	1.0	0.49	12/20/18 11:47	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.33	12/20/18 11:47	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.41	12/20/18 11:47	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.35	12/20/18 11:47	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	2.0	12/20/18 11:47	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.30	12/20/18 11:47	
1,2-Dichloroethane	ug/L	ND	1.0	0.24	12/20/18 11:47	
1,2-Dichloropropane	ug/L	ND	1.0	0.27	12/20/18 11:47	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.24	12/20/18 11:47	
1,3-Dichloropropane	ug/L	ND	1.0	0.28	12/20/18 11:47	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.33	12/20/18 11:47	
2,2-Dichloropropane	ug/L	ND	1.0	0.13	12/20/18 11:47	
2-Butanone (MEK)	ug/L	ND	5.0	0.96	12/20/18 11:47	
2-Chlorotoluene	ug/L	ND	1.0	0.35	12/20/18 11:47	
2-Hexanone	ug/L	ND	5.0	0.46	12/20/18 11:47	
4-Chlorotoluene	ug/L	ND	1.0	0.31	12/20/18 11:47	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	0.33	12/20/18 11:47	
Acetone	ug/L	ND	25.0	10.0	12/20/18 11:47	
Benzene	ug/L	ND	1.0	0.25	12/20/18 11:47	
Bromobenzene	ug/L	ND	1.0	0.30	12/20/18 11:47	
Bromochloromethane	ug/L	ND	1.0	0.17	12/20/18 11:47	
Bromodichloromethane	ug/L	ND	1.0	0.18	12/20/18 11:47	
Bromoform	ug/L	ND	1.0	0.26	12/20/18 11:47	
Bromomethane	ug/L	ND	5.0	0.29	12/20/18 11:47	
Carbon tetrachloride	ug/L	ND	1.0	0.25	12/20/18 11:47	
Chlorobenzene	ug/L	ND	1.0	0.23	12/20/18 11:47	
Chloroethane	ug/L	ND	1.0	0.54	12/20/18 11:47	
Chloroform	ug/L	ND	1.0	0.14	12/20/18 11:47	
Chloromethane	ug/L	ND	1.0	0.11	12/20/18 11:47	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.19	12/20/18 11:47	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.13	12/20/18 11:47	
Dibromochloromethane	ug/L	ND	1.0	0.21	12/20/18 11:47	
Dibromomethane	ug/L	ND	1.0	0.21	12/20/18 11:47	
Dichlorodifluoromethane	ug/L	ND	1.0	0.21	12/20/18 11:47	
Diisopropyl ether	ug/L	ND	1.0	0.12	12/20/18 11:47	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

METHOD BLANK: 2456444 Matrix: Water
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	0.30	12/20/18 11:47	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.71	12/20/18 11:47	
m&p-Xylene	ug/L	ND	2.0	0.66	12/20/18 11:47	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.21	12/20/18 11:47	
Methylene Chloride	ug/L	ND	2.0	0.97	12/20/18 11:47	
Naphthalene	ug/L	ND	1.0	0.24	12/20/18 11:47	
o-Xylene	ug/L	ND	1.0	0.23	12/20/18 11:47	
p-Isopropyltoluene	ug/L	ND	1.0	0.31	12/20/18 11:47	
Styrene	ug/L	ND	1.0	0.26	12/20/18 11:47	
Tetrachloroethene	ug/L	ND	1.0	0.46	12/20/18 11:47	
Toluene	ug/L	ND	1.0	0.26	12/20/18 11:47	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.49	12/20/18 11:47	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.26	12/20/18 11:47	
Trichloroethene	ug/L	ND	1.0	0.47	12/20/18 11:47	
Trichlorofluoromethane	ug/L	ND	1.0	0.20	12/20/18 11:47	
Vinyl acetate	ug/L	ND	2.0	0.35	12/20/18 11:47	
Vinyl chloride	ug/L	ND	1.0	0.62	12/20/18 11:47	
Xylene (Total)	ug/L	ND	1.0	1.0	12/20/18 11:47	
1,2-Dichloroethane-d4 (S)	%	99	70-130		12/20/18 11:47	
4-Bromofluorobenzene (S)	%	101	70-130		12/20/18 11:47	
Toluene-d8 (S)	%	105	70-130		12/20/18 11:47	

LABORATORY CONTROL SAMPLE: 2456445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.8	100	70-130	
1,1,1-Trichloroethane	ug/L	50	48.8	98	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	48.9	98	70-130	
1,1,2-Trichloroethane	ug/L	50	48.5	97	70-130	
1,1-Dichloroethane	ug/L	50	47.0	94	70-130	
1,1-Dichloroethene	ug/L	50	48.0	96	70-130	
1,1-Dichloropropene	ug/L	50	48.8	98	70-130	
1,2,3-Trichlorobenzene	ug/L	50	50.7	101	70-130	
1,2,3-Trichloropropane	ug/L	50	48.7	97	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.5	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	46.1	92	70-130	
1,2-Dichlorobenzene	ug/L	50	48.3	97	70-130	
1,2-Dichloroethane	ug/L	50	45.1	90	70-130	
1,2-Dichloropropane	ug/L	50	47.1	94	70-130	
1,3-Dichlorobenzene	ug/L	50	47.2	94	70-130	
1,3-Dichloropropane	ug/L	50	49.2	98	70-130	
1,4-Dichlorobenzene	ug/L	50	45.8	92	70-130	
2,2-Dichloropropane	ug/L	50	48.6	97	70-130	
2-Butanone (MEK)	ug/L	100	106	106	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

LABORATORY CONTROL SAMPLE: 2456445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	50	47.7	95	70-130	
2-Hexanone	ug/L	100	113	113	70-130	
4-Chlorotoluene	ug/L	50	48.2	96	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-130	
Acetone	ug/L	100	103	103	70-130	
Benzene	ug/L	50	48.1	96	70-130	
Bromobenzene	ug/L	50	48.6	97	70-130	
Bromochloromethane	ug/L	50	45.0	90	70-130	
Bromodichloromethane	ug/L	50	46.3	93	70-130	
Bromoform	ug/L	50	42.0	84	70-130	
Bromomethane	ug/L	50	61.2	122	70-130	
Carbon tetrachloride	ug/L	50	48.5	97	70-130	
Chlorobenzene	ug/L	50	46.8	94	70-130	
Chloroethane	ug/L	50	47.9	96	70-130	
Chloroform	ug/L	50	44.4	89	70-130	
Chloromethane	ug/L	50	67.6	135	70-130	L1
cis-1,2-Dichloroethene	ug/L	50	48.2	96	70-130	
cis-1,3-Dichloropropene	ug/L	50	50.0	100	70-130	
Dibromochloromethane	ug/L	50	51.8	104	70-130	
Dibromomethane	ug/L	50	45.5	91	70-130	
Dichlorodifluoromethane	ug/L	50	91.8	184	70-130	L1
Diisopropyl ether	ug/L	50	51.0	102	70-130	
Ethylbenzene	ug/L	50	48.5	97	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.7	101	70-130	
m&p-Xylene	ug/L	100	96.8	97	70-130	
Methyl-tert-butyl ether	ug/L	50	51.1	102	70-130	
Methylene Chloride	ug/L	50	48.7	97	70-130	
Naphthalene	ug/L	50	52.6	105	70-130	
o-Xylene	ug/L	50	49.6	99	70-130	
p-Isopropyltoluene	ug/L	50	50.3	101	70-130	
Styrene	ug/L	50	50.0	100	70-130	
Tetrachloroethene	ug/L	50	49.3	99	70-130	
Toluene	ug/L	50	45.1	90	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.4	105	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.2	100	70-130	
Trichloroethene	ug/L	50	47.3	95	70-130	
Trichlorofluoromethane	ug/L	50	44.5	89	70-130	
Vinyl acetate	ug/L	100	111	111	70-130	
Vinyl chloride	ug/L	50	57.8	116	70-130	
Xylene (Total)	ug/L	150	146	98	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			97	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2456446 2456447

Parameter	Units	92410726003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.4	21.0	102	105	70-130	3	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.1	111	110	70-130	0	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.8	21.2	99	106	70-130	7	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.2	21.9	101	110	70-130	8	30	
1,1-Dichloroethane	ug/L	ND	20	20	21.4	21.4	107	107	70-130	0	30	
1,1-Dichloroethene	ug/L	ND	20	20	23.4	22.9	117	114	70-130	2	30	
1,1-Dichloropropene	ug/L	ND	20	20	20.4	20.4	102	102	70-130	0	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	19.8	20.0	99	100	70-130	1	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	20.4	21.2	102	106	70-130	4	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	20.1	20.4	101	102	70-130	1	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	21.2	21.7	106	109	70-130	3	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	19.6	19.7	98	98	70-130	0	30	
1,2-Dichloroethane	ug/L	ND	20	20	19.7	20.3	99	102	70-130	3	30	
1,2-Dichloropropane	ug/L	ND	20	20	20.6	20.9	103	105	70-130	2	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.5	20.5	98	102	70-130	5	30	
1,3-Dichloropropane	ug/L	ND	20	20	20.1	21.2	101	106	70-130	5	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.3	19.9	101	100	70-130	2	30	
2,2-Dichloropropane	ug/L	ND	20	20	21.5	21.7	107	109	70-130	1	30	
2-Butanone (MEK)	ug/L	ND	40	40	45.3	45.6	113	114	70-130	1	30	
2-Chlorotoluene	ug/L	ND	20	20	20.6	21.0	103	105	70-130	2	30	
2-Hexanone	ug/L	ND	40	40	42.3	44.4	106	111	70-130	5	30	
4-Chlorotoluene	ug/L	ND	20	20	20.5	20.8	102	104	70-130	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	41.9	42.4	105	106	70-130	1	30	
Acetone	ug/L	ND	40	40	43.5	44.2	109	111	70-130	2	30	
Benzene	ug/L	ND	20	20	21.2	21.4	106	107	70-130	1	30	
Bromobenzene	ug/L	ND	20	20	20.5	21.1	102	105	70-130	3	30	
Bromochloromethane	ug/L	ND	20	20	21.7	21.4	109	107	70-130	2	30	
Bromodichloromethane	ug/L	ND	20	20	20.3	21.0	102	105	70-130	3	30	
Bromoform	ug/L	ND	20	20	18.4	20.2	92	101	70-130	9	30	
Bromomethane	ug/L	ND	20	20	20.4	21.2	102	106	70-130	4	30	
Carbon tetrachloride	ug/L	ND	20	20	21.2	22.0	106	110	70-130	4	30	
Chlorobenzene	ug/L	ND	20	20	19.8	21.4	99	107	70-130	8	30	
Chloroethane	ug/L	ND	20	20	24.3	22.2	122	111	70-130	9	30	
Chloroform	ug/L	ND	20	20	22.1	21.9	110	110	70-130	1	30	
Chloromethane	ug/L	ND	20	20	31.2	31.3	156	156	70-130	0	30	M0
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.1	21.7	106	108	70-130	3	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.2	21.2	101	106	70-130	5	30	
Dibromochloromethane	ug/L	ND	20	20	19.6	21.6	98	108	70-130	10	30	
Dibromomethane	ug/L	ND	20	20	20.2	20.7	101	103	70-130	2	30	
Dichlorodifluoromethane	ug/L	ND	20	20	44.2	42.8	221	214	70-130	3	30	M0
Diisopropyl ether	ug/L	ND	20	20	21.2	21.4	106	107	70-130	1	30	
Ethylbenzene	ug/L	ND	20	20	20.2	21.4	101	107	70-130	6	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	20.6	21.2	103	106	70-130	3	30	
m&p-Xylene	ug/L	ND	40	40	41.7	43.3	104	108	70-130	4	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2456446 2456447

Parameter	Units	92410726003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methyl-tert-butyl ether	ug/L	ND	20	20	20.9	21.0	105	105	70-130	0	30	
Methylene Chloride	ug/L	ND	20	20	21.3	21.7	106	109	70-130	2	30	
Naphthalene	ug/L	ND	20	20	20.1	20.0	100	100	70-130	0	30	
o-Xylene	ug/L	ND	20	20	20.9	22.1	104	110	70-130	6	30	
p-Isopropyltoluene	ug/L	ND	20	20	20.3	20.1	102	100	70-130	1	30	
Styrene	ug/L	ND	20	20	20.0	20.9	100	105	70-130	4	30	
Tetrachloroethene	ug/L	ND	20	20	20.2	21.6	101	108	70-130	7	30	
Toluene	ug/L	ND	20	20	20.7	20.9	103	104	70-130	1	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.2	22.4	111	112	70-130	1	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.3	20.9	102	105	70-130	3	30	
Trichloroethene	ug/L	ND	20	20	20.7	20.9	103	105	70-130	1	30	
Trichlorofluoromethane	ug/L	ND	20	20	22.9	23.0	115	115	70-130	1	30	
Vinyl acetate	ug/L	ND	40	40	43.2	42.8	108	107	70-130	1	30	
Vinyl chloride	ug/L	ND	20	20	25.6	24.9	128	125	70-130	3	30	
Xylene (Total)	ug/L	ND	60	60	62.5	65.4	104	109	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%						106	103	70-130			
4-Bromofluorobenzene (S)	%						96	102	70-130			
Toluene-d8 (S)	%						99	101	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

QC Batch: 447869 Analysis Method: EPA 8270D
QC Batch Method: EPA 3510C Analysis Description: 8270 Water MSSV SC
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

METHOD BLANK: 2453803 Matrix: Water
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	1.4	12/18/18 15:23	
1,2-Dichlorobenzene	ug/L	ND	10.0	1.5	12/18/18 15:23	
1,3-Dichlorobenzene	ug/L	ND	10.0	1.4	12/18/18 15:23	
1,4-Dichlorobenzene	ug/L	ND	10.0	1.4	12/18/18 15:23	
1-Methylnaphthalene	ug/L	ND	10.0	1.4	12/18/18 15:23	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	1.8	12/18/18 15:23	
2,4,5-Trichlorophenol	ug/L	ND	10.0	1.5	12/18/18 15:23	
2,4,6-Trichlorophenol	ug/L	ND	10.0	1.4	12/18/18 15:23	
2,4-Dichlorophenol	ug/L	ND	10.0	1.6	12/18/18 15:23	
2,4-Dimethylphenol	ug/L	ND	10.0	1.6	12/18/18 15:23	
2,4-Dinitrophenol	ug/L	ND	50.0	5.1	12/18/18 15:23	
2,4-Dinitrotoluene	ug/L	ND	10.0	1.5	12/18/18 15:23	
2,6-Dinitrotoluene	ug/L	ND	10.0	1.4	12/18/18 15:23	
2-Chloronaphthalene	ug/L	ND	10.0	1.6	12/18/18 15:23	
2-Chlorophenol	ug/L	ND	10.0	1.5	12/18/18 15:23	
2-Methylnaphthalene	ug/L	ND	10.0	1.4	12/18/18 15:23	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	1.6	12/18/18 15:23	
2-Nitroaniline	ug/L	ND	50.0	2.3	12/18/18 15:23	
2-Nitrophenol	ug/L	ND	10.0	1.6	12/18/18 15:23	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	1.4	12/18/18 15:23	
3,3'-Dichlorobenzidine	ug/L	ND	50.0	3.9	12/18/18 15:23	
3-Nitroaniline	ug/L	ND	50.0	2.7	12/18/18 15:23	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	2.2	12/18/18 15:23	
4-Bromophenylphenyl ether	ug/L	ND	10.0	1.5	12/18/18 15:23	
4-Chloro-3-methylphenol	ug/L	ND	20.0	2.8	12/18/18 15:23	
4-Chloroaniline	ug/L	ND	50.0	2.8	12/18/18 15:23	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	1.6	12/18/18 15:23	
4-Nitroaniline	ug/L	ND	50.0	3.4	12/18/18 15:23	
4-Nitrophenol	ug/L	ND	50.0	4.3	12/18/18 15:23	
Acenaphthene	ug/L	ND	10.0	1.6	12/18/18 15:23	
Acenaphthylene	ug/L	ND	10.0	1.5	12/18/18 15:23	
Aniline	ug/L	ND	10.0	1.2	12/18/18 15:23	
Anthracene	ug/L	ND	10.0	1.7	12/18/18 15:23	
Benzo(a)anthracene	ug/L	ND	10.0	2.1	12/18/18 15:23	
Benzo(a)pyrene	ug/L	ND	10.0	2.2	12/18/18 15:23	
Benzo(b)fluoranthene	ug/L	ND	10.0	2.2	12/18/18 15:23	
Benzo(g,h,i)perylene	ug/L	ND	10.0	2.1	12/18/18 15:23	
Benzo(k)fluoranthene	ug/L	ND	10.0	2.0	12/18/18 15:23	
Benzoic Acid	ug/L	ND	50.0	5.0	12/18/18 15:23	
Benzyl alcohol	ug/L	ND	20.0	3.1	12/18/18 15:23	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	1.6	12/18/18 15:23	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

METHOD BLANK: 2453803 Matrix: Water
Associated Lab Samples: 92410726001, 92410726002, 92410726003, 92410726004, 92410726006, 92410726007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethyl) ether	ug/L	ND	10.0	1.7	12/18/18 15:23	
bis(2-Ethylhexyl)phthalate	ug/L	ND	6.0	2.3	12/18/18 15:23	
Butylbenzylphthalate	ug/L	ND	10.0	2.5	12/18/18 15:23	
Chrysene	ug/L	ND	10.0	2.1	12/18/18 15:23	
Di-n-butylphthalate	ug/L	ND	10.0	2.0	12/18/18 15:23	
Di-n-octylphthalate	ug/L	ND	10.0	1.5	12/18/18 15:23	
Dibenz(a,h)anthracene	ug/L	ND	10.0	2.0	12/18/18 15:23	
Dibenzofuran	ug/L	ND	10.0	1.7	12/18/18 15:23	
Diethylphthalate	ug/L	ND	10.0	1.6	12/18/18 15:23	
Dimethylphthalate	ug/L	ND	10.0	1.4	12/18/18 15:23	
Fluoranthene	ug/L	ND	10.0	2.2	12/18/18 15:23	
Fluorene	ug/L	ND	10.0	1.6	12/18/18 15:23	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	1.6	12/18/18 15:23	
Hexachlorobenzene	ug/L	ND	10.0	1.7	12/18/18 15:23	
Hexachlorocyclopentadiene	ug/L	ND	10.0	1.3	12/18/18 15:23	
Hexachloroethane	ug/L	ND	10.0	1.8	12/18/18 15:23	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	2.0	12/18/18 15:23	
Isophorone	ug/L	ND	10.0	1.5	12/18/18 15:23	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	1.7	12/18/18 15:23	
N-Nitrosodimethylamine	ug/L	ND	10.0	1.6	12/18/18 15:23	
N-Nitrosodiphenylamine	ug/L	ND	10.0	1.4	12/18/18 15:23	
Naphthalene	ug/L	ND	10.0	1.4	12/18/18 15:23	
Nitrobenzene	ug/L	ND	10.0	1.6	12/18/18 15:23	
Pentachlorophenol	ug/L	ND	50.0	3.5	12/18/18 15:23	
Phenanthrene	ug/L	ND	10.0	1.6	12/18/18 15:23	
Phenol	ug/L	ND	10.0	1.3	12/18/18 15:23	
Pyrene	ug/L	ND	10.0	2.2	12/18/18 15:23	
2,4,6-Tribromophenol (S)	%	60	27-110		12/18/18 15:23	
2-Fluorobiphenyl (S)	%	49	27-110		12/18/18 15:23	
2-Fluorophenol (S)	%	28	12-110		12/18/18 15:23	
Nitrobenzene-d5 (S)	%	51	21-110		12/18/18 15:23	
Phenol-d6 (S)	%	20	10-110		12/18/18 15:23	
Terphenyl-d14 (S)	%	62	31-107		12/18/18 15:23	

LABORATORY CONTROL SAMPLE: 2453804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	27.4	55	70-130	
1,2-Dichlorobenzene	ug/L	50	26.0	52	70-130	
1,3-Dichlorobenzene	ug/L	50	24.5	49	70-130	
1,4-Dichlorobenzene	ug/L	50	26.4	53	70-130	
1-Methylnaphthalene	ug/L	50	34.4	69	70-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	32.2	64	70-130	
2,4,5-Trichlorophenol	ug/L	50	36.6	73	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

LABORATORY CONTROL SAMPLE: 2453804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/L	50	38.6	77	70-130	
2,4-Dichlorophenol	ug/L	50	34.5	69	70-130	
2,4-Dimethylphenol	ug/L	50	30.8	62	70-130	
2,4-Dinitrophenol	ug/L	250	198	79	70-130	
2,4-Dinitrotoluene	ug/L	50	44.1	88	70-130	
2,6-Dinitrotoluene	ug/L	50	44.5	89	70-130	
2-Chloronaphthalene	ug/L	50	34.0	68	70-130	
2-Chlorophenol	ug/L	50	30.7	61	70-130	
2-Methylnaphthalene	ug/L	50	34.3	69	70-130	
2-Methylphenol(o-Cresol)	ug/L	50	26.7	53	70-130	
2-Nitroaniline	ug/L	100	76.3	76	70-130	
2-Nitrophenol	ug/L	50	37.1	74	70-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	23.7	47	70-130	
3,3'-Dichlorobenzidine	ug/L	100	42.2J	42	70-130	
3-Nitroaniline	ug/L	100	61.1	61	70-130	
4,6-Dinitro-2-methylphenol	ug/L	100	107	107	70-130	
4-Bromophenylphenyl ether	ug/L	50	43.8	88	70-130	
4-Chloro-3-methylphenol	ug/L	100	69.7	70	70-130	
4-Chloroaniline	ug/L	100	46.9J	47	70-130	
4-Chlorophenylphenyl ether	ug/L	50	39.5	79	70-130	
4-Nitroaniline	ug/L	100	74.1	74	70-130	
4-Nitrophenol	ug/L	250	85.8	34	70-130	
Acenaphthene	ug/L	50	39.5	79	70-130	
Acenaphthylene	ug/L	50	41.0	82	70-130	
Aniline	ug/L	50	17.2	34	70-130	
Anthracene	ug/L	50	46.3	93	70-130	
Benzo(a)anthracene	ug/L	50	47.7	95	70-130	
Benzo(a)pyrene	ug/L	50	46.8	94	70-130	
Benzo(b)fluoranthene	ug/L	50	47.0	94	70-130	
Benzo(g,h,i)perylene	ug/L	50	47.2	94	70-130	
Benzo(k)fluoranthene	ug/L	50	46.3	93	70-130	
Benzoic Acid	ug/L	250	28.7J	11	70-130	
Benzyl alcohol	ug/L	100	56.4	56	70-130	
bis(2-Chloroethoxy)methane	ug/L	50	34.2	68	70-130	
bis(2-Chloroethyl) ether	ug/L	50	35.0	70	70-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	46.1	92	70-130	
Butylbenzylphthalate	ug/L	50	46.5	93	70-130	
Chrysene	ug/L	50	46.3	93	70-130	
Di-n-butylphthalate	ug/L	50	45.0	90	70-130	
Di-n-octylphthalate	ug/L	50	49.4	99	70-130	
Dibenz(a,h)anthracene	ug/L	50	45.7	91	70-130	
Dibenzofuran	ug/L	50	37.7	75	70-130	
Diethylphthalate	ug/L	50	41.8	84	70-130	
Dimethylphthalate	ug/L	50	40.8	82	70-130	
Fluoranthene	ug/L	50	47.0	94	70-130	
Fluorene	ug/L	50	42.1	84	70-130	
Hexachloro-1,3-butadiene	ug/L	50	23.8	48	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

LABORATORY CONTROL SAMPLE: 2453804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorobenzene	ug/L	50	43.4	87	70-130	
Hexachlorocyclopentadiene	ug/L	50	28.6	57	70-130	
Hexachloroethane	ug/L	50	24.5	49	70-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	47.6	95	70-130	
Isophorone	ug/L	50	32.2	64	70-130	
N-Nitroso-di-n-propylamine	ug/L	50	34.1	68	70-130	
N-Nitrosodimethylamine	ug/L	50	20.6	41	70-130	
N-Nitrosodiphenylamine	ug/L	50	44.0	88	70-130	
Naphthalene	ug/L	50	33.6	67	70-130	
Nitrobenzene	ug/L	50	33.5	67	70-130	
Pentachlorophenol	ug/L	100	78.3	78	70-130	
Phenanthrene	ug/L	50	45.6	91	70-130	
Phenol	ug/L	50	14.0	28	70-130	1g,2g
Pyrene	ug/L	50	47.1	94	70-130	
2,4,6-Tribromophenol (S)	%			93	27-110	
2-Fluorobiphenyl (S)	%			64	27-110	
2-Fluorophenol (S)	%			36	12-110	
Nitrobenzene-d5 (S)	%			65	21-110	
Phenol-d6 (S)	%			26	10-110	
Terphenyl-d14 (S)	%			60	31-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2453805 2453806

Parameter	Units	92410726003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	50	50	25.7	21.5	51	43	70-130	18	30	
1,2-Dichlorobenzene	ug/L	ND	50	50	24.0	21.8	48	44	70-130	10	30	
1,3-Dichlorobenzene	ug/L	ND	50	50	22.5	20.5	45	41	70-130	9	30	
1,4-Dichlorobenzene	ug/L	ND	50	50	24.8	22.1	50	44	70-130	12	30	
1-Methylnaphthalene	ug/L	ND	50	50	33.6	28.3	67	57	70-130	17	30	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	50	50	27.4	23.9	55	48	70-130	13	30	
2,4,5-Trichlorophenol	ug/L	ND	50	50	35.4	28.2	71	56	70-130	23	30	
2,4,6-Trichlorophenol	ug/L	ND	50	50	37.9	30.1	76	60	70-130	23	30	
2,4-Dichlorophenol	ug/L	ND	50	50	31.6	24.7	63	49	70-130	24	30	
2,4-Dimethylphenol	ug/L	ND	50	50	29.9	23.1	60	46	70-130	26	3	
2,4-Dinitrophenol	ug/L	ND	250	250	213	176	85	70	70-130	19	30	
2,4-Dinitrotoluene	ug/L	ND	50	50	43.2	37.2	86	74	70-130	15	30	
2,6-Dinitrotoluene	ug/L	ND	50	50	44.2	37.5	88	75	70-130	17	30	
2-Chloronaphthalene	ug/L	ND	50	50	32.8	27.6	66	55	70-130	17	30	
2-Chlorophenol	ug/L	ND	50	50	25.0	20.9	50	42	70-130	18	30	
2-Methylnaphthalene	ug/L	ND	50	50	33.1	27.8	66	56	70-130	17	30	
2-Methylphenol(o-Cresol)	ug/L	ND	50	50	23.1	19.2	46	38	70-130	19	30	
2-Nitroaniline	ug/L	ND	100	100	77.5	65.6	77	66	70-130	17	30	
2-Nitrophenol	ug/L	ND	50	50	32.7	25.7	65	51	70-130	24	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2453805 2453806

Parameter	Units	92410726003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50	50	20.9	17.6	42	35	70-130	17	30	
3,3'-Dichlorobenzidine	ug/L	ND	100	100	39.4J	43.3J	39	43	70-130		30	
3-Nitroaniline	ug/L	ND	100	100	64.8	59.4	65	59	70-130	9	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	100	100	100	81.7	100	82	70-130	21	30	
4-Bromophenylphenyl ether	ug/L	ND	50	50	41.1	34.3	82	69	70-130	18	30	
4-Chloro-3-methylphenol	ug/L	ND	100	100	69.1	55.5	69	55	70-130	22	30	
4-Chloroaniline	ug/L	ND	100	100	42.9J	39.0J	43	39	70-130		30	
4-Chlorophenylphenyl ether	ug/L	ND	50	50	38.5	32.6	77	65	70-130	17	30	
4-Nitroaniline	ug/L	ND	100	100	76.0	65.8	76	66	70-130	14	30	
4-Nitrophenol	ug/L	ND	250	250	87.2	75.1	35	30	70-130	15	30	
Acenaphthene	ug/L	2.8J	50	50	41.9	35.6	78	66	70-130	16	30	
Acenaphthylene	ug/L	ND	50	50	40.2	34.2	80	68	70-130	16	30	
Aniline	ug/L	ND	50	50	14.9	14.8	30	30	70-130	1	30	
Anthracene	ug/L	ND	50	50	43.5	36.8	87	74	70-130	17	30	
Benzo(a)anthracene	ug/L	ND	50	50	42.9	38.2	86	76	70-130	12	30	
Benzo(a)pyrene	ug/L	ND	50	50	43.7	37.3	87	75	70-130	16	30	
Benzo(b)fluoranthene	ug/L	ND	50	50	42.5	36.5	85	73	70-130	15	30	
Benzo(g,h,i)perylene	ug/L	ND	50	50	42.7	35.9	85	72	70-130	17	30	
Benzo(k)fluoranthene	ug/L	ND	50	50	43.2	37.4	86	75	70-130	14	30	
Benzoic Acid	ug/L	ND	250	250	79.2	56.6	32	23	70-130	33	0	
Benzyl alcohol	ug/L	ND	100	100	49.9	43.7	50	44	70-130	13	30	
bis(2-Chloroethoxy)methane	ug/L	ND	50	50	32.2	26.2	64	52	70-130	20	30	
bis(2-Chloroethyl) ether	ug/L	ND	50	50	28.5	25.5	57	51	70-130	11	30	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	50	41.4	36.0	83	72	70-130	14	30	
Butylbenzylphthalate	ug/L	ND	50	50	42.5	36.8	85	74	70-130	14	30	
Chrysene	ug/L	ND	50	50	43.0	37.3	86	75	70-130	14	30	
Di-n-butylphthalate	ug/L	ND	50	50	41.5	35.5	83	71	70-130	16	30	
Di-n-octylphthalate	ug/L	ND	50	50	44.4	38.1	89	76	70-130	15	30	
Dibenz(a,h)anthracene	ug/L	ND	50	50	43.5	36.7	87	73	70-130	17	30	
Dibenzofuran	ug/L	ND	50	50	37.3	31.4	75	63	70-130	17	30	
Diethylphthalate	ug/L	ND	50	50	40.9	35.2	82	70	70-130	15	30	
Dimethylphthalate	ug/L	ND	50	50	40.0	33.3	80	67	70-130	18	30	
Fluoranthene	ug/L	ND	50	50	44.5	38.3	89	77	70-130	15	30	
Fluorene	ug/L	ND	50	50	41.5	35.6	83	71	70-130	15	30	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	22.0	17.5	44	35	70-130	23	30	
Hexachlorobenzene	ug/L	ND	50	50	40.2	34.1	80	68	70-130	16	30	
Hexachlorocyclopentadiene	ug/L	ND	50	50	25.9	20.2	52	40	70-130	25	30	
Hexachloroethane	ug/L	ND	50	50	22.8	20.3	46	41	70-130	11	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	50	50	42.9	36.9	86	74	70-130	15	30	
Isophorone	ug/L	ND	50	50	31.0	26.3	62	53	70-130	17	30	
N-Nitroso-di-n-propylamine	ug/L	ND	50	50	31.4	27.9	63	56	70-130	12	30	
N-Nitrosodimethylamine	ug/L	ND	50	50	19.2	16.9	38	34	70-130	13	30	
N-Nitrosodiphenylamine	ug/L	ND	50	50	41.5	36.9	83	74	70-130	12	30	
Naphthalene	ug/L	ND	50	50	31.4	26.1	63	52	70-130	18	30	
Nitrobenzene	ug/L	ND	50	50	30.9	25.7	62	51	70-130	18	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2453805 2453806

Parameter	Units	92410726003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Pentachlorophenol	ug/L	ND	100	100	76.8	62.0	77	62	70-130	21	30	
Phenanthrene	ug/L	ND	50	50	43.1	37.1	86	74	70-130	15	30	
Phenol	ug/L	ND	50	50	13.1	11.2	26	22	70-130	15	30	
Pyrene	ug/L	ND	50	50	42.7	38.4	85	77	70-130	11	30	
2,4,6-Tribromophenol (S)	%						85	70	27-110			
2-Fluorobiphenyl (S)	%						62	51	27-110			
2-Fluorophenol (S)	%						31	26	12-110			
Nitrobenzene-d5 (S)	%						60	48	21-110			
Phenol-d6 (S)	%						22	20	10-110			
Terphenyl-d14 (S)	%						38	24	31-107			

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

1g	Comment applie to all compounds outside control limits.
2g	Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S0	Surrogate recovery outside laboratory control limits.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER BRAMLETTE MGP J18120357
Pace Project No.: 92410726

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92410726001	**MW-30S**	EPA 3510C	447869	EPA 8270D	448300
92410726002	**MW-30S DUP**	EPA 3510C	447869	EPA 8270D	448300
92410726003	**MW-31S MS/MSD**	EPA 3510C	447869	EPA 8270D	448300
92410726004	**MW-31 TZ**	EPA 3510C	447869	EPA 8270D	448300
92410726006	**EQB**	EPA 3510C	447869	EPA 8270D	448300
92410726007	**FB 1**	EPA 3510C	447869	EPA 8270D	448300
92410726001	**MW-30S**	EPA 8260B	448475		
92410726002	**MW-30S DUP**	EPA 8260B	448475		
92410726003	**MW-31S MS/MSD**	EPA 8260B	448475		
92410726004	**MW-31 TZ**	EPA 8260B	448475		
92410726005	**TRIP BLANK**	EPA 8260B	448278		
92410726006	**EQB**	EPA 8260B	448475		
92410726007	**FB 1**	EPA 8260B	448475		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☒ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

WO# : 92410726

92410726

Client Name: Synterra

Project

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: 12/13 AR

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☒ IR Gun ID: 93-T046 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp (°C): 2.3 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 2.3

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☒ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

				Comments/Discrepancy:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☒ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☒ No	☐ N/A	10.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project

WO#: 92410726

PM: KLH1 Due Date: 12/20/18

CLIENT: 92-Duke Ener

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1										2						3													
2										2						3													
3										2						3													
4										2						3													
5										2						3													
6																2													
7										2						3													
8										2						3													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Synterra	Report To:	Heather Smith	Attention:	
Address:	148 River street	Copy To:		Company Name:	
Suite 220, Greenville, SC 29601				Address:	Regulatory Agency
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Bramlette MGP Site	Pace Project Manager:	kevin.herring@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	7754
					State / Location: SC

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): 8260	8270 SVOC	Trip BLANK	Residual Chlorine (Y/N)	92410726
1	MW-30S	WW				12/12/18	1410		5	X			X						X	X				001
2	MW-30S Dup	WW				12/12/18	1410		5	X			X						X	X				002
3	MW-31S	WW				12/12/18	1153		5	X			X						X	X				003
4	MW-31S MS/MSD	WW				12/12/18	1153		5	X			X						X	X				↓
5	MW-31TZ	WW				12/12/18	1254		5	X			X						X	X				004
6	Trip Blank	WT				12/12/18	1250		2				X								X			005
7	EQB	WT				12/12/18	1455		5	X			X						X	X				006
8	FB1	WT				12/12/18	1505		5	X			X						X	X				007
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12-12-18	1605		12-12-18	1605				
		12/13/18	1310	A. Rudert/PACE/AVL	12/13/18	1310	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tom King

SIGNATURE of SAMPLER: [signature] DATE Signed: 12/12/18

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

January 08, 2019

Program Manager
Duke Energy
13339 Hagers Ferry Road
Bldg. 7405 MG30A2
Huntersville, NC 28078

RE: Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Dear Program Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Program Manager, Duke Energy
Mike Mastbaum
Todd Plating, Synterra
Rick Powell
B. Russo
Heather Smith

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92411780001	**SW-7**	Water	12/19/18 14:30	12/20/18 11:15
92411780002	**SW-8**	Water	12/19/18 14:00	12/20/18 11:15
92411780003	**SW-9**	Water	12/19/18 13:25	12/20/18 11:15
92411780004	**SW-10**	Water	12/19/18 12:50	12/20/18 11:15
92411780005	**SW-11**	Water	12/19/18 11:45	12/20/18 11:15
92411780006	**SW-12 MS/MSD**	Water	12/19/18 10:30	12/20/18 11:15
92411780007	**SW-DUP1**	Water	12/19/18 09:00	12/20/18 11:15
92411780008	**FB-01**	Water	12/19/18 15:00	12/20/18 11:15
92411780009	**EQB-01**	Water	12/19/18 16:00	12/20/18 11:15
92411780010	**TRIP BLANK**	Water	12/19/18 00:00	12/20/18 11:15

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SAMPLE ANALYTE COUNT

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92411780001	**SW-7**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780002	**SW-8**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780003	**SW-9**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780004	**SW-10**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780005	**SW-11**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780006	**SW-12 MS/MSD**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780007	**SW-DUP1**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780008	**FB-01**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780009	**EQB-01**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	GAW	62	PASI-C
92411780010	**TRIP BLANK**	EPA 8260B	GAW	62	PASI-C

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Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Org SC
Client: Duke Energy
Date: January 08, 2019

General Information:
9 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 449049

S0: Surrogate recovery outside laboratory control limits.

- EQB-01 (Lab ID: 92411780009)
  - Terphenyl-d14 (S)
- FB-01 (Lab ID: 92411780008)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Org SC
Client: Duke Energy
Date: January 08, 2019

Analyte Comments:

QC Batch: 449049

1g: Comment applies to all compounds outside control limits.

- LCS (Lab ID: 2459226)
  - Phenol

2g: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Footnote applies to all recoveries exceeding QC limits.

- MS (Lab ID: 2459227)
  - Phenol
- MSD (Lab ID: 2459228)
  - Phenol

3g: Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits.

- LCS (Lab ID: 2459226)
  - Phenol

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Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Method: **EPA 8260B**
Description: 8260 MSV Low Level SC
Client: Duke Energy
Date: January 08, 2019

General Information:
10 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 449771

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92411780006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 2462065)
  - 2,2-Dichloropropane

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-7 **Lab ID: 92411780001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	83-32-9	
Acenaphthylene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	208-96-8	
Aniline	ND	ug/L	9.6	1.2	1	12/21/18 12:23	12/24/18 12:48	62-53-3	
Anthracene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 12:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 12:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 12:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 12:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.6	1.9	1	12/21/18 12:23	12/24/18 12:48	207-08-9	
Benzoic Acid	ND	ug/L	48.1	4.8	1	12/21/18 12:23	12/24/18 12:48	65-85-0	
Benzyl alcohol	ND	ug/L	19.2	3.0	1	12/21/18 12:23	12/24/18 12:48	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.6	2.4	1	12/21/18 12:23	12/24/18 12:48	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.2	2.7	1	12/21/18 12:23	12/24/18 12:48	59-50-7	
4-Chloroaniline	ND	ug/L	48.1	2.7	1	12/21/18 12:23	12/24/18 12:48	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	91-58-7	
2-Chlorophenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	7005-72-3	
Chrysene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 12:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 12:48	53-70-3	
Dibenzofuran	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 12:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 12:48	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	48.1	3.7	1	12/21/18 12:23	12/24/18 12:48	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	120-83-2	
Diethylphthalate	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	105-67-9	
Dimethylphthalate	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.6	1.9	1	12/21/18 12:23	12/24/18 12:48	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.2	2.2	1	12/21/18 12:23	12/24/18 12:48	534-52-1	
2,4-Dinitrophenol	ND	ug/L	48.1	4.9	1	12/21/18 12:23	12/24/18 12:48	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 12:48	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.8	2.2	1	12/21/18 12:23	12/24/18 12:48	117-81-7	
Fluoranthene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 12:48	206-44-0	
Fluorene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	87-68-3	
Hexachlorobenzene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 12:48	77-47-4	
Hexachloroethane	ND	ug/L	9.6	1.8	1	12/21/18 12:23	12/24/18 12:48	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 12:48	193-39-5	
Isophorone	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-7 **Lab ID: 92411780001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	15831-10-4	
Naphthalene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 12:48	91-20-3	
2-Nitroaniline	ND	ug/L	48.1	2.2	1	12/21/18 12:23	12/24/18 12:48	88-74-4	
3-Nitroaniline	ND	ug/L	48.1	2.6	1	12/21/18 12:23	12/24/18 12:48	99-09-2	
4-Nitroaniline	ND	ug/L	48.1	3.2	1	12/21/18 12:23	12/24/18 12:48	100-01-6	
Nitrobenzene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	98-95-3	
2-Nitrophenol	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	88-75-5	
4-Nitrophenol	ND	ug/L	48.1	4.1	1	12/21/18 12:23	12/24/18 12:48	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 12:48	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.6	1.8	1	12/21/18 12:23	12/24/18 12:48	108-60-1	
Pentachlorophenol	ND	ug/L	48.1	3.4	1	12/21/18 12:23	12/24/18 12:48	87-86-5	
Phenanthrene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 12:48	85-01-8	
Phenol	ND	ug/L	9.6	1.2	1	12/21/18 12:23	12/24/18 12:48	108-95-2	
Pyrene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 12:48	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 12:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	57	%	21-110		1	12/21/18 12:23	12/24/18 12:48	4165-60-0	
2-Fluorobiphenyl (S)	58	%	27-110		1	12/21/18 12:23	12/24/18 12:48	321-60-8	
Terphenyl-d14 (S)	59	%	31-107		1	12/21/18 12:23	12/24/18 12:48	1718-51-0	
Phenol-d6 (S)	18	%	10-110		1	12/21/18 12:23	12/24/18 12:48	13127-88-3	
2-Fluorophenol (S)	26	%	12-110		1	12/21/18 12:23	12/24/18 12:48	367-12-4	
2,4,6-Tribromophenol (S)	73	%	27-110		1	12/21/18 12:23	12/24/18 12:48	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 14:31	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 14:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 14:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 14:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 14:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 14:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 14:31	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 14:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 14:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 14:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 14:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 14:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 14:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:31	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-7 **Lab ID: 92411780001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 14:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 14:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 14:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 14:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 14:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 14:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 14:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 14:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 14:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 14:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 14:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 14:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 14:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 14:31	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 14:31	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 14:31	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 14:31	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:31	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 14:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 14:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 14:31	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 14:31	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 14:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 14:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 14:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 14:31	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 14:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 14:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 14:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 14:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 14:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 14:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 14:31	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 14:31	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 14:31	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 14:31	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 14:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 14:31	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/27/18 14:31	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-7 **Lab ID: 92411780001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	95	%	70-130		1		12/27/18 14:31	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/27/18 14:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-8 **Lab ID: 92411780002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	83-32-9	
Acenaphthylene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	208-96-8	
Aniline	ND	ug/L	9.8	1.2	1	12/21/18 12:23	12/24/18 13:21	62-53-3	
Anthracene	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:21	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 13:21	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 13:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:21	207-08-9	
Benzoic Acid	ND	ug/L	49.0	4.9	1	12/21/18 12:23	12/24/18 13:21	65-85-0	
Benzyl alcohol	ND	ug/L	19.6	3.0	1	12/21/18 12:23	12/24/18 13:21	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.8	2.4	1	12/21/18 12:23	12/24/18 13:21	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.6	2.8	1	12/21/18 12:23	12/24/18 13:21	59-50-7	
4-Chloroaniline	ND	ug/L	49.0	2.8	1	12/21/18 12:23	12/24/18 13:21	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:21	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	91-58-7	
2-Chlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	7005-72-3	
Chrysene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:21	53-70-3	
Dibenzofuran	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	49.0	3.8	1	12/21/18 12:23	12/24/18 13:21	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	120-83-2	
Diethylphthalate	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	105-67-9	
Dimethylphthalate	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.8	1.9	1	12/21/18 12:23	12/24/18 13:21	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.6	2.2	1	12/21/18 12:23	12/24/18 13:21	534-52-1	
2,4-Dinitrophenol	ND	ug/L	49.0	5.0	1	12/21/18 12:23	12/24/18 13:21	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.9	2.3	1	12/21/18 12:23	12/24/18 13:21	117-81-7	
Fluoranthene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:21	206-44-0	
Fluorene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	87-68-3	
Hexachlorobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 13:21	77-47-4	
Hexachloroethane	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 13:21	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:21	193-39-5	
Isophorone	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-8 **Lab ID: 92411780002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	15831-10-4	
Naphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	91-20-3	
2-Nitroaniline	ND	ug/L	49.0	2.2	1	12/21/18 12:23	12/24/18 13:21	88-74-4	
3-Nitroaniline	ND	ug/L	49.0	2.6	1	12/21/18 12:23	12/24/18 13:21	99-09-2	
4-Nitroaniline	ND	ug/L	49.0	3.3	1	12/21/18 12:23	12/24/18 13:21	100-01-6	
Nitrobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	98-95-3	
2-Nitrophenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	88-75-5	
4-Nitrophenol	ND	ug/L	49.0	4.2	1	12/21/18 12:23	12/24/18 13:21	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:21	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 13:21	108-60-1	
Pentachlorophenol	ND	ug/L	49.0	3.5	1	12/21/18 12:23	12/24/18 13:21	87-86-5	
Phenanthrene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:21	85-01-8	
Phenol	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 13:21	108-95-2	
Pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:21	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:21	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%	21-110		1	12/21/18 12:23	12/24/18 13:21	4165-60-0	
2-Fluorobiphenyl (S)	66	%	27-110		1	12/21/18 12:23	12/24/18 13:21	321-60-8	
Terphenyl-d14 (S)	75	%	31-107		1	12/21/18 12:23	12/24/18 13:21	1718-51-0	
Phenol-d6 (S)	19	%	10-110		1	12/21/18 12:23	12/24/18 13:21	13127-88-3	
2-Fluorophenol (S)	30	%	12-110		1	12/21/18 12:23	12/24/18 13:21	367-12-4	
2,4,6-Tribromophenol (S)	82	%	27-110		1	12/21/18 12:23	12/24/18 13:21	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 14:47	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 14:47	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:47	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 14:47	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 14:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 14:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 14:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 14:47	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 14:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 14:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 14:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 14:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 14:47	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 14:47	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:47	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-8 **Lab ID: 92411780002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 14:47	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 14:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 14:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:47	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:47	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 14:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 14:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 14:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 14:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 14:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 14:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 14:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 14:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 14:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 14:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 14:47	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 14:47	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 14:47	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 14:47	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:47	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 14:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 14:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 14:47	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 14:47	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 14:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 14:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 14:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 14:47	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 14:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 14:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 14:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 14:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 14:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 14:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 14:47	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 14:47	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 14:47	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 14:47	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 14:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 14:47	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/27/18 14:47	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-8 **Lab ID: 92411780002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		12/27/18 14:47	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		12/27/18 14:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-9 **Lab ID: 92411780003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	83-32-9	
Acenaphthylene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	208-96-8	
Aniline	ND	ug/L	9.8	1.2	1	12/21/18 12:23	12/24/18 13:54	62-53-3	
Anthracene	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 13:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 13:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:54	207-08-9	
Benzoic Acid	ND	ug/L	49.0	4.9	1	12/21/18 12:23	12/24/18 13:54	65-85-0	
Benzyl alcohol	ND	ug/L	19.6	3.0	1	12/21/18 12:23	12/24/18 13:54	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.8	2.4	1	12/21/18 12:23	12/24/18 13:54	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.6	2.8	1	12/21/18 12:23	12/24/18 13:54	59-50-7	
4-Chloroaniline	ND	ug/L	49.0	2.8	1	12/21/18 12:23	12/24/18 13:54	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:54	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	91-58-7	
2-Chlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	7005-72-3	
Chrysene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:54	53-70-3	
Dibenzofuran	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	49.0	3.8	1	12/21/18 12:23	12/24/18 13:54	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	120-83-2	
Diethylphthalate	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	105-67-9	
Dimethylphthalate	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.8	1.9	1	12/21/18 12:23	12/24/18 13:54	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.6	2.2	1	12/21/18 12:23	12/24/18 13:54	534-52-1	
2,4-Dinitrophenol	ND	ug/L	49.0	5.0	1	12/21/18 12:23	12/24/18 13:54	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.9	2.3	1	12/21/18 12:23	12/24/18 13:54	117-81-7	
Fluoranthene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:54	206-44-0	
Fluorene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	87-68-3	
Hexachlorobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 13:54	77-47-4	
Hexachloroethane	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 13:54	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 13:54	193-39-5	
Isophorone	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-9 **Lab ID: 92411780003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	15831-10-4	
Naphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	91-20-3	
2-Nitroaniline	ND	ug/L	49.0	2.2	1	12/21/18 12:23	12/24/18 13:54	88-74-4	
3-Nitroaniline	ND	ug/L	49.0	2.6	1	12/21/18 12:23	12/24/18 13:54	99-09-2	
4-Nitroaniline	ND	ug/L	49.0	3.3	1	12/21/18 12:23	12/24/18 13:54	100-01-6	
Nitrobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	98-95-3	
2-Nitrophenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	88-75-5	
4-Nitrophenol	ND	ug/L	49.0	4.2	1	12/21/18 12:23	12/24/18 13:54	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 13:54	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 13:54	108-60-1	
Pentachlorophenol	ND	ug/L	49.0	3.5	1	12/21/18 12:23	12/24/18 13:54	87-86-5	
Phenanthrene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 13:54	85-01-8	
Phenol	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 13:54	108-95-2	
Pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 13:54	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 13:54	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 13:54	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	40	%	21-110		1	12/21/18 12:23	12/24/18 13:54	4165-60-0	
2-Fluorobiphenyl (S)	40	%	27-110		1	12/21/18 12:23	12/24/18 13:54	321-60-8	
Terphenyl-d14 (S)	42	%	31-107		1	12/21/18 12:23	12/24/18 13:54	1718-51-0	
Phenol-d6 (S)	11	%	10-110		1	12/21/18 12:23	12/24/18 13:54	13127-88-3	
2-Fluorophenol (S)	17	%	12-110		1	12/21/18 12:23	12/24/18 13:54	367-12-4	
2,4,6-Tribromophenol (S)	41	%	27-110		1	12/21/18 12:23	12/24/18 13:54	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 15:03	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 15:03	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:03	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 15:03	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 15:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 15:03	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 15:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 15:03	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 15:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 15:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 15:03	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 15:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 15:03	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 15:03	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:03	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-9 **Lab ID: 92411780003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 15:03	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:03	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 15:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 15:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 15:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 15:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 15:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 15:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 15:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 15:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 15:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 15:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 15:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 15:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 15:03	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 15:03	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 15:03	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 15:03	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:03	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 15:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 15:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 15:03	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 15:03	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 15:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 15:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 15:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 15:03	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 15:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 15:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 15:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 15:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 15:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 15:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 15:03	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 15:03	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 15:03	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 15:03	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 15:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 15:03	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		12/27/18 15:03	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-9 **Lab ID: 92411780003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 15:03	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/27/18 15:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-10 **Lab ID: 92411780004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	83-32-9	
Acenaphthylene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	208-96-8	
Aniline	ND	ug/L	9.8	1.2	1	12/21/18 12:23	12/24/18 14:26	62-53-3	
Anthracene	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:26	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 14:26	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 14:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:26	207-08-9	
Benzoic Acid	ND	ug/L	49.0	4.9	1	12/21/18 12:23	12/24/18 14:26	65-85-0	
Benzyl alcohol	ND	ug/L	19.6	3.0	1	12/21/18 12:23	12/24/18 14:26	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.8	2.4	1	12/21/18 12:23	12/24/18 14:26	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.6	2.8	1	12/21/18 12:23	12/24/18 14:26	59-50-7	
4-Chloroaniline	ND	ug/L	49.0	2.8	1	12/21/18 12:23	12/24/18 14:26	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:26	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	91-58-7	
2-Chlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	7005-72-3	
Chrysene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:26	53-70-3	
Dibenzofuran	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	49.0	3.8	1	12/21/18 12:23	12/24/18 14:26	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	120-83-2	
Diethylphthalate	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	105-67-9	
Dimethylphthalate	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.8	1.9	1	12/21/18 12:23	12/24/18 14:26	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.6	2.2	1	12/21/18 12:23	12/24/18 14:26	534-52-1	
2,4-Dinitrophenol	ND	ug/L	49.0	5.0	1	12/21/18 12:23	12/24/18 14:26	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.9	2.3	1	12/21/18 12:23	12/24/18 14:26	117-81-7	
Fluoranthene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:26	206-44-0	
Fluorene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	87-68-3	
Hexachlorobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 14:26	77-47-4	
Hexachloroethane	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 14:26	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:26	193-39-5	
Isophorone	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-10 **Lab ID: 92411780004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	15831-10-4	
Naphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	91-20-3	
2-Nitroaniline	ND	ug/L	49.0	2.2	1	12/21/18 12:23	12/24/18 14:26	88-74-4	
3-Nitroaniline	ND	ug/L	49.0	2.6	1	12/21/18 12:23	12/24/18 14:26	99-09-2	
4-Nitroaniline	ND	ug/L	49.0	3.3	1	12/21/18 12:23	12/24/18 14:26	100-01-6	
Nitrobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	98-95-3	
2-Nitrophenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	88-75-5	
4-Nitrophenol	ND	ug/L	49.0	4.2	1	12/21/18 12:23	12/24/18 14:26	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:26	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 14:26	108-60-1	
Pentachlorophenol	ND	ug/L	49.0	3.5	1	12/21/18 12:23	12/24/18 14:26	87-86-5	
Phenanthrene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:26	85-01-8	
Phenol	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 14:26	108-95-2	
Pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:26	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:26	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:26	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	60	%	21-110		1	12/21/18 12:23	12/24/18 14:26	4165-60-0	
2-Fluorobiphenyl (S)	61	%	27-110		1	12/21/18 12:23	12/24/18 14:26	321-60-8	
Terphenyl-d14 (S)	36	%	31-107		1	12/21/18 12:23	12/24/18 14:26	1718-51-0	
Phenol-d6 (S)	19	%	10-110		1	12/21/18 12:23	12/24/18 14:26	13127-88-3	
2-Fluorophenol (S)	27	%	12-110		1	12/21/18 12:23	12/24/18 14:26	367-12-4	
2,4,6-Tribromophenol (S)	54	%	27-110		1	12/21/18 12:23	12/24/18 14:26	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 15:19	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 15:19	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:19	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 15:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 15:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 15:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 15:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 15:19	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 15:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 15:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 15:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 15:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 15:19	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 15:19	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:19	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-10 **Lab ID: 92411780004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 15:19	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 15:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 15:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:19	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:19	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 15:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 15:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 15:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 15:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 15:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 15:19	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 15:19	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 15:19	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 15:19	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 15:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 15:19	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 15:19	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:19	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 15:19	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 15:19	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:19	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 15:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 15:19	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 15:19	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 15:19	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 15:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 15:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 15:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 15:19	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 15:19	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:19	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 15:19	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 15:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 15:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 15:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 15:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 15:19	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 15:19	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 15:19	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 15:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 15:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 15:19	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		12/27/18 15:19	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-10 **Lab ID: 92411780004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 15:19	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/27/18 15:19	2037-26-5	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-11 **Lab ID: 92411780005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	83-32-9	
Acenaphthylene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	208-96-8	
Aniline	ND	ug/L	9.8	1.2	1	12/21/18 12:23	12/24/18 14:59	62-53-3	
Anthracene	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 14:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.8	2.1	1	12/21/18 12:23	12/24/18 14:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:59	207-08-9	
Benzoic Acid	ND	ug/L	49.0	4.9	1	12/21/18 12:23	12/24/18 14:59	65-85-0	
Benzyl alcohol	ND	ug/L	19.6	3.0	1	12/21/18 12:23	12/24/18 14:59	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.8	2.4	1	12/21/18 12:23	12/24/18 14:59	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.6	2.8	1	12/21/18 12:23	12/24/18 14:59	59-50-7	
4-Chloroaniline	ND	ug/L	49.0	2.8	1	12/21/18 12:23	12/24/18 14:59	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:59	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	91-58-7	
2-Chlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	7005-72-3	
Chrysene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:59	53-70-3	
Dibenzofuran	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	49.0	3.8	1	12/21/18 12:23	12/24/18 14:59	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	120-83-2	
Diethylphthalate	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	105-67-9	
Dimethylphthalate	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.8	1.9	1	12/21/18 12:23	12/24/18 14:59	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.6	2.2	1	12/21/18 12:23	12/24/18 14:59	534-52-1	
2,4-Dinitrophenol	ND	ug/L	49.0	5.0	1	12/21/18 12:23	12/24/18 14:59	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.9	2.3	1	12/21/18 12:23	12/24/18 14:59	117-81-7	
Fluoranthene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:59	206-44-0	
Fluorene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	87-68-3	
Hexachlorobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 14:59	77-47-4	
Hexachloroethane	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 14:59	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.8	2.0	1	12/21/18 12:23	12/24/18 14:59	193-39-5	
Isophorone	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-11 **Lab ID: 92411780005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	15831-10-4	
Naphthalene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	91-20-3	
2-Nitroaniline	ND	ug/L	49.0	2.2	1	12/21/18 12:23	12/24/18 14:59	88-74-4	
3-Nitroaniline	ND	ug/L	49.0	2.6	1	12/21/18 12:23	12/24/18 14:59	99-09-2	
4-Nitroaniline	ND	ug/L	49.0	3.3	1	12/21/18 12:23	12/24/18 14:59	100-01-6	
Nitrobenzene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	98-95-3	
2-Nitrophenol	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	88-75-5	
4-Nitrophenol	ND	ug/L	49.0	4.2	1	12/21/18 12:23	12/24/18 14:59	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.8	1.7	1	12/21/18 12:23	12/24/18 14:59	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.8	1.8	1	12/21/18 12:23	12/24/18 14:59	108-60-1	
Pentachlorophenol	ND	ug/L	49.0	3.5	1	12/21/18 12:23	12/24/18 14:59	87-86-5	
Phenanthrene	ND	ug/L	9.8	1.6	1	12/21/18 12:23	12/24/18 14:59	85-01-8	
Phenol	ND	ug/L	9.8	1.3	1	12/21/18 12:23	12/24/18 14:59	108-95-2	
Pyrene	ND	ug/L	9.8	2.2	1	12/21/18 12:23	12/24/18 14:59	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.8	1.5	1	12/21/18 12:23	12/24/18 14:59	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.8	1.4	1	12/21/18 12:23	12/24/18 14:59	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%	21-110		1	12/21/18 12:23	12/24/18 14:59	4165-60-0	
2-Fluorobiphenyl (S)	68	%	27-110		1	12/21/18 12:23	12/24/18 14:59	321-60-8	
Terphenyl-d14 (S)	47	%	31-107		1	12/21/18 12:23	12/24/18 14:59	1718-51-0	
Phenol-d6 (S)	22	%	10-110		1	12/21/18 12:23	12/24/18 14:59	13127-88-3	
2-Fluorophenol (S)	30	%	12-110		1	12/21/18 12:23	12/24/18 14:59	367-12-4	
2,4,6-Tribromophenol (S)	61	%	27-110		1	12/21/18 12:23	12/24/18 14:59	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 15:35	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 15:35	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:35	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 15:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 15:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 15:35	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 15:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 15:35	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 15:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 15:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 15:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 15:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 15:35	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 15:35	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:35	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-11 **Lab ID: 92411780005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 15:35	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 15:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 15:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:35	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 15:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 15:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 15:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 15:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 15:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 15:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 15:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 15:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 15:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 15:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 15:35	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 15:35	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 15:35	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 15:35	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:35	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 15:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 15:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 15:35	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 15:35	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 15:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 15:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 15:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 15:35	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 15:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 15:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 15:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 15:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 15:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 15:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 15:35	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 15:35	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 15:35	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 15:35	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 15:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 15:35	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		12/27/18 15:35	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-11 **Lab ID: 92411780005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 15:35	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		12/27/18 15:35	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-12 MS/MSD **Lab ID: 92411780006** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	208-96-8	
Aniline	ND	ug/L	10.0	1.2	1	12/21/18 12:23	12/26/18 09:51	62-53-3	
Anthracene	ND	ug/L	10.0	1.7	1	12/21/18 12:23	12/26/18 09:51	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	2.1	1	12/21/18 12:23	12/26/18 09:51	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.2	1	12/21/18 12:23	12/26/18 09:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	2.2	1	12/21/18 12:23	12/26/18 09:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	2.1	1	12/21/18 12:23	12/26/18 09:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	2.0	1	12/21/18 12:23	12/26/18 09:51	207-08-9	
Benzoic Acid	ND	ug/L	50.0	5.0	1	12/21/18 12:23	12/26/18 09:51	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	3.1	1	12/21/18 12:23	12/26/18 09:51	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	2.5	1	12/21/18 12:23	12/26/18 09:51	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	12/21/18 12:23	12/26/18 09:51	59-50-7	
4-Chloroaniline	ND	ug/L	50.0	2.8	1	12/21/18 12:23	12/26/18 09:51	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	12/21/18 12:23	12/26/18 09:51	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	7005-72-3	
Chrysene	ND	ug/L	10.0	2.1	1	12/21/18 12:23	12/26/18 09:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	2.0	1	12/21/18 12:23	12/26/18 09:51	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.7	1	12/21/18 12:23	12/26/18 09:51	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	50.0	3.9	1	12/21/18 12:23	12/26/18 09:51	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	2.0	1	12/21/18 12:23	12/26/18 09:51	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	2.2	1	12/21/18 12:23	12/26/18 09:51	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	5.1	1	12/21/18 12:23	12/26/18 09:51	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.3	1	12/21/18 12:23	12/26/18 09:51	117-81-7	
Fluoranthene	ND	ug/L	10.0	2.2	1	12/21/18 12:23	12/26/18 09:51	206-44-0	
Fluorene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.7	1	12/21/18 12:23	12/26/18 09:51	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.3	1	12/21/18 12:23	12/26/18 09:51	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.8	1	12/21/18 12:23	12/26/18 09:51	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	2.0	1	12/21/18 12:23	12/26/18 09:51	193-39-5	
Isophorone	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-12 MS/MSD **Lab ID: 92411780006** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	91-20-3	
2-Nitroaniline	ND	ug/L	50.0	2.3	1	12/21/18 12:23	12/26/18 09:51	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.7	1	12/21/18 12:23	12/26/18 09:51	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	3.4	1	12/21/18 12:23	12/26/18 09:51	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	4.3	1	12/21/18 12:23	12/26/18 09:51	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.7	1	12/21/18 12:23	12/26/18 09:51	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.8	1	12/21/18 12:23	12/26/18 09:51	108-60-1	
Pentachlorophenol	ND	ug/L	50.0	3.5	1	12/21/18 12:23	12/26/18 09:51	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.6	1	12/21/18 12:23	12/26/18 09:51	85-01-8	
Phenol	ND	ug/L	10.0	1.3	1	12/21/18 12:23	12/26/18 09:51	108-95-2	
Pyrene	ND	ug/L	10.0	2.2	1	12/21/18 12:23	12/26/18 09:51	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	12/21/18 12:23	12/26/18 09:51	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	12/21/18 12:23	12/26/18 09:51	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%	21-110		1	12/21/18 12:23	12/26/18 09:51	4165-60-0	
2-Fluorobiphenyl (S)	62	%	27-110		1	12/21/18 12:23	12/26/18 09:51	321-60-8	
Terphenyl-d14 (S)	37	%	31-107		1	12/21/18 12:23	12/26/18 09:51	1718-51-0	
Phenol-d6 (S)	19	%	10-110		1	12/21/18 12:23	12/26/18 09:51	13127-88-3	
2-Fluorophenol (S)	27	%	12-110		1	12/21/18 12:23	12/26/18 09:51	367-12-4	
2,4,6-Tribromophenol (S)	56	%	27-110		1	12/21/18 12:23	12/26/18 09:51	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 15:52	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 15:52	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:52	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 15:52	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 15:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 15:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 15:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 15:52	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 15:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 15:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 15:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 15:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 15:52	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 15:52	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:52	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-12 MS/MSD **Lab ID: 92411780006** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 15:52	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 15:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 15:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 15:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 15:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 15:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 15:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 15:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 15:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 15:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 15:52	594-20-7	M1
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 15:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 15:52	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 15:52	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 15:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 15:52	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 15:52	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 15:52	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 15:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 15:52	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 15:52	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 15:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 15:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 15:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 15:52	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 15:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 15:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 15:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 15:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 15:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 15:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 15:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 15:52	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 15:52	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 15:52	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 15:52	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 15:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 15:52	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/27/18 15:52	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-12 MS/MSD **Lab ID: 92411780006** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 15:52	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		12/27/18 15:52	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-DUP1 **Lab ID: 92411780007** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	83-32-9	
Acenaphthylene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	208-96-8	
Aniline	ND	ug/L	9.6	1.2	1	12/21/18 12:23	12/24/18 17:10	62-53-3	
Anthracene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 17:10	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 17:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 17:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 17:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.6	1.9	1	12/21/18 12:23	12/24/18 17:10	207-08-9	
Benzoic Acid	ND	ug/L	48.1	4.8	1	12/21/18 12:23	12/24/18 17:10	65-85-0	
Benzyl alcohol	ND	ug/L	19.2	3.0	1	12/21/18 12:23	12/24/18 17:10	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.6	2.4	1	12/21/18 12:23	12/24/18 17:10	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.2	2.7	1	12/21/18 12:23	12/24/18 17:10	59-50-7	
4-Chloroaniline	ND	ug/L	48.1	2.7	1	12/21/18 12:23	12/24/18 17:10	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	91-58-7	
2-Chlorophenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	7005-72-3	
Chrysene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 17:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 17:10	53-70-3	
Dibenzofuran	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 17:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 17:10	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	48.1	3.7	1	12/21/18 12:23	12/24/18 17:10	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	120-83-2	
Diethylphthalate	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	105-67-9	
Dimethylphthalate	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.6	1.9	1	12/21/18 12:23	12/24/18 17:10	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.2	2.2	1	12/21/18 12:23	12/24/18 17:10	534-52-1	
2,4-Dinitrophenol	ND	ug/L	48.1	4.9	1	12/21/18 12:23	12/24/18 17:10	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 17:10	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.8	2.2	1	12/21/18 12:23	12/24/18 17:10	117-81-7	
Fluoranthene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 17:10	206-44-0	
Fluorene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	87-68-3	
Hexachlorobenzene	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 17:10	77-47-4	
Hexachloroethane	ND	ug/L	9.6	1.8	1	12/21/18 12:23	12/24/18 17:10	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.6	2.0	1	12/21/18 12:23	12/24/18 17:10	193-39-5	
Isophorone	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-DUP1 **Lab ID: 92411780007** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	15831-10-4	
Naphthalene	ND	ug/L	9.6	1.3	1	12/21/18 12:23	12/24/18 17:10	91-20-3	
2-Nitroaniline	ND	ug/L	48.1	2.2	1	12/21/18 12:23	12/24/18 17:10	88-74-4	
3-Nitroaniline	ND	ug/L	48.1	2.6	1	12/21/18 12:23	12/24/18 17:10	99-09-2	
4-Nitroaniline	ND	ug/L	48.1	3.2	1	12/21/18 12:23	12/24/18 17:10	100-01-6	
Nitrobenzene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	98-95-3	
2-Nitrophenol	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	88-75-5	
4-Nitrophenol	ND	ug/L	48.1	4.1	1	12/21/18 12:23	12/24/18 17:10	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.6	1.6	1	12/21/18 12:23	12/24/18 17:10	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.6	1.8	1	12/21/18 12:23	12/24/18 17:10	108-60-1	
Pentachlorophenol	ND	ug/L	48.1	3.4	1	12/21/18 12:23	12/24/18 17:10	87-86-5	
Phenanthrene	ND	ug/L	9.6	1.5	1	12/21/18 12:23	12/24/18 17:10	85-01-8	
Phenol	ND	ug/L	9.6	1.2	1	12/21/18 12:23	12/24/18 17:10	108-95-2	
Pyrene	ND	ug/L	9.6	2.1	1	12/21/18 12:23	12/24/18 17:10	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.6	1.4	1	12/21/18 12:23	12/24/18 17:10	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%	21-110		1	12/21/18 12:23	12/24/18 17:10	4165-60-0	
2-Fluorobiphenyl (S)	54	%	27-110		1	12/21/18 12:23	12/24/18 17:10	321-60-8	
Terphenyl-d14 (S)	54	%	31-107		1	12/21/18 12:23	12/24/18 17:10	1718-51-0	
Phenol-d6 (S)	16	%	10-110		1	12/21/18 12:23	12/24/18 17:10	13127-88-3	
2-Fluorophenol (S)	25	%	12-110		1	12/21/18 12:23	12/24/18 17:10	367-12-4	
2,4,6-Tribromophenol (S)	68	%	27-110		1	12/21/18 12:23	12/24/18 17:10	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 16:08	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 16:08	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 16:08	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 16:08	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 16:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 16:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 16:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 16:08	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 16:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 16:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 16:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 16:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 16:08	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 16:08	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 16:08	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-DUP1 **Lab ID: 92411780007** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 16:08	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 16:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 16:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 16:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 16:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 16:08	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 16:08	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 16:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 16:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 16:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 16:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 16:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 16:08	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 16:08	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 16:08	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 16:08	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 16:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 16:08	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 16:08	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 16:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 16:08	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 16:08	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 16:08	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 16:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 16:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 16:08	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 16:08	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 16:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 16:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 16:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 16:08	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 16:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 16:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 16:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 16:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 16:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 16:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 16:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 16:08	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 16:08	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 16:08	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 16:08	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 16:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 16:08	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		12/27/18 16:08	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: SW-DUP1 **Lab ID: 92411780007** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		12/27/18 16:08	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/27/18 16:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: FB-01 **Lab ID: 92411780008** Collected: 12/19/18 15:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	83-32-9	
Acenaphthylene	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	208-96-8	
Aniline	ND	ug/L	9.4	1.2	1	12/21/18 12:23	12/24/18 17:44	62-53-3	
Anthracene	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.4	2.0	1	12/21/18 12:23	12/24/18 17:44	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.4	2.1	1	12/21/18 12:23	12/24/18 17:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.4	2.1	1	12/21/18 12:23	12/24/18 17:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.4	2.0	1	12/21/18 12:23	12/24/18 17:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.4	1.9	1	12/21/18 12:23	12/24/18 17:44	207-08-9	
Benzoic Acid	ND	ug/L	47.2	4.7	1	12/21/18 12:23	12/24/18 17:44	65-85-0	
Benzyl alcohol	ND	ug/L	18.9	2.9	1	12/21/18 12:23	12/24/18 17:44	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.4	2.3	1	12/21/18 12:23	12/24/18 17:44	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	18.9	2.7	1	12/21/18 12:23	12/24/18 17:44	59-50-7	
4-Chloroaniline	ND	ug/L	47.2	2.7	1	12/21/18 12:23	12/24/18 17:44	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	91-58-7	
2-Chlorophenol	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	7005-72-3	
Chrysene	ND	ug/L	9.4	2.0	1	12/21/18 12:23	12/24/18 17:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.4	1.9	1	12/21/18 12:23	12/24/18 17:44	53-70-3	
Dibenzofuran	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	47.2	3.6	1	12/21/18 12:23	12/24/18 17:44	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	120-83-2	
Diethylphthalate	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	105-67-9	
Dimethylphthalate	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.4	1.9	1	12/21/18 12:23	12/24/18 17:44	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	18.9	2.1	1	12/21/18 12:23	12/24/18 17:44	534-52-1	
2,4-Dinitrophenol	ND	ug/L	47.2	4.8	1	12/21/18 12:23	12/24/18 17:44	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.7	2.2	1	12/21/18 12:23	12/24/18 17:44	117-81-7	
Fluoranthene	ND	ug/L	9.4	2.1	1	12/21/18 12:23	12/24/18 17:44	206-44-0	
Fluorene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	87-68-3	
Hexachlorobenzene	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	77-47-4	
Hexachloroethane	ND	ug/L	9.4	1.7	1	12/21/18 12:23	12/24/18 17:44	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.4	1.9	1	12/21/18 12:23	12/24/18 17:44	193-39-5	
Isophorone	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: FB-01 **Lab ID: 92411780008** Collected: 12/19/18 15:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	15831-10-4	
Naphthalene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	91-20-3	
2-Nitroaniline	ND	ug/L	47.2	2.1	1	12/21/18 12:23	12/24/18 17:44	88-74-4	
3-Nitroaniline	ND	ug/L	47.2	2.5	1	12/21/18 12:23	12/24/18 17:44	99-09-2	
4-Nitroaniline	ND	ug/L	47.2	3.2	1	12/21/18 12:23	12/24/18 17:44	100-01-6	
Nitrobenzene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	98-95-3	
2-Nitrophenol	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	88-75-5	
4-Nitrophenol	ND	ug/L	47.2	4.0	1	12/21/18 12:23	12/24/18 17:44	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.4	1.6	1	12/21/18 12:23	12/24/18 17:44	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.4	1.7	1	12/21/18 12:23	12/24/18 17:44	108-60-1	
Pentachlorophenol	ND	ug/L	47.2	3.3	1	12/21/18 12:23	12/24/18 17:44	87-86-5	
Phenanthrene	ND	ug/L	9.4	1.5	1	12/21/18 12:23	12/24/18 17:44	85-01-8	
Phenol	ND	ug/L	9.4	1.2	1	12/21/18 12:23	12/24/18 17:44	108-95-2	
Pyrene	ND	ug/L	9.4	2.1	1	12/21/18 12:23	12/24/18 17:44	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.4	1.3	1	12/21/18 12:23	12/24/18 17:44	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.4	1.4	1	12/21/18 12:23	12/24/18 17:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%	21-110		1	12/21/18 12:23	12/24/18 17:44	4165-60-0	
2-Fluorobiphenyl (S)	53	%	27-110		1	12/21/18 12:23	12/24/18 17:44	321-60-8	
Terphenyl-d14 (S)	22	%	31-107		1	12/21/18 12:23	12/24/18 17:44	1718-51-0	S0
Phenol-d6 (S)	17	%	10-110		1	12/21/18 12:23	12/24/18 17:44	13127-88-3	
2-Fluorophenol (S)	24	%	12-110		1	12/21/18 12:23	12/24/18 17:44	367-12-4	
2,4,6-Tribromophenol (S)	43	%	27-110		1	12/21/18 12:23	12/24/18 17:44	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 13:43	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 13:43	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:43	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 13:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 13:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 13:43	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 13:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 13:43	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 13:43	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 13:43	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: FB-01 **Lab ID: 92411780008** Collected: 12/19/18 15:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 13:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 13:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 13:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 13:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 13:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 13:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 13:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 13:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 13:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 13:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 13:43	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 13:43	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 13:43	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 13:43	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 13:43	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 13:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 13:43	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 13:43	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 13:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 13:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 13:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 13:43	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 13:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 13:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 13:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 13:43	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 13:43	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 13:43	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 13:43	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 13:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 13:43	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		12/27/18 13:43	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: FB-01 **Lab ID: 92411780008** Collected: 12/19/18 15:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 13:43	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		12/27/18 13:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: EQB-01 **Lab ID: 92411780009** Collected: 12/19/18 16:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	83-32-9	
Acenaphthylene	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	208-96-8	
Aniline	ND	ug/L	9.9	1.2	1	12/21/18 12:23	12/24/18 18:17	62-53-3	
Anthracene	ND	ug/L	9.9	1.7	1	12/21/18 12:23	12/24/18 18:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	9.9	2.1	1	12/21/18 12:23	12/24/18 18:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	9.9	2.2	1	12/21/18 12:23	12/24/18 18:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	9.9	2.2	1	12/21/18 12:23	12/24/18 18:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	9.9	2.1	1	12/21/18 12:23	12/24/18 18:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	9.9	2.0	1	12/21/18 12:23	12/24/18 18:17	207-08-9	
Benzoic Acid	ND	ug/L	49.5	5.0	1	12/21/18 12:23	12/24/18 18:17	65-85-0	
Benzyl alcohol	ND	ug/L	19.8	3.0	1	12/21/18 12:23	12/24/18 18:17	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	101-55-3	
Butylbenzylphthalate	ND	ug/L	9.9	2.5	1	12/21/18 12:23	12/24/18 18:17	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	19.8	2.8	1	12/21/18 12:23	12/24/18 18:17	59-50-7	
4-Chloroaniline	ND	ug/L	49.5	2.8	1	12/21/18 12:23	12/24/18 18:17	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	9.9	1.7	1	12/21/18 12:23	12/24/18 18:17	111-44-4	
2-Chloronaphthalene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	91-58-7	
2-Chlorophenol	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	7005-72-3	
Chrysene	ND	ug/L	9.9	2.1	1	12/21/18 12:23	12/24/18 18:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	9.9	2.0	1	12/21/18 12:23	12/24/18 18:17	53-70-3	
Dibenzofuran	ND	ug/L	9.9	1.7	1	12/21/18 12:23	12/24/18 18:17	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	49.5	3.8	1	12/21/18 12:23	12/24/18 18:17	91-94-1	
2,4-Dichlorophenol	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	120-83-2	
Diethylphthalate	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	84-66-2	
2,4-Dimethylphenol	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	105-67-9	
Dimethylphthalate	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	131-11-3	
Di-n-butylphthalate	ND	ug/L	9.9	2.0	1	12/21/18 12:23	12/24/18 18:17	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	19.8	2.2	1	12/21/18 12:23	12/24/18 18:17	534-52-1	
2,4-Dinitrophenol	ND	ug/L	49.5	5.0	1	12/21/18 12:23	12/24/18 18:17	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	606-20-2	
Di-n-octylphthalate	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.9	2.3	1	12/21/18 12:23	12/24/18 18:17	117-81-7	
Fluoranthene	ND	ug/L	9.9	2.2	1	12/21/18 12:23	12/24/18 18:17	206-44-0	
Fluorene	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	87-68-3	
Hexachlorobenzene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	9.9	1.3	1	12/21/18 12:23	12/24/18 18:17	77-47-4	
Hexachloroethane	ND	ug/L	9.9	1.8	1	12/21/18 12:23	12/24/18 18:17	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.9	2.0	1	12/21/18 12:23	12/24/18 18:17	193-39-5	
Isophorone	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: EQB-01 **Lab ID: 92411780009** Collected: 12/19/18 16:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Org SC	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
1-Methylnaphthalene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	90-12-0	
2-Methylnaphthalene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	15831-10-4	
Naphthalene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	91-20-3	
2-Nitroaniline	ND	ug/L	49.5	2.2	1	12/21/18 12:23	12/24/18 18:17	88-74-4	
3-Nitroaniline	ND	ug/L	49.5	2.6	1	12/21/18 12:23	12/24/18 18:17	99-09-2	
4-Nitroaniline	ND	ug/L	49.5	3.3	1	12/21/18 12:23	12/24/18 18:17	100-01-6	
Nitrobenzene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	98-95-3	
2-Nitrophenol	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	88-75-5	
4-Nitrophenol	ND	ug/L	49.5	4.2	1	12/21/18 12:23	12/24/18 18:17	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	9.9	1.7	1	12/21/18 12:23	12/24/18 18:17	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.9	1.8	1	12/21/18 12:23	12/24/18 18:17	108-60-1	
Pentachlorophenol	ND	ug/L	49.5	3.5	1	12/21/18 12:23	12/24/18 18:17	87-86-5	
Phenanthrene	ND	ug/L	9.9	1.6	1	12/21/18 12:23	12/24/18 18:17	85-01-8	
Phenol	ND	ug/L	9.9	1.3	1	12/21/18 12:23	12/24/18 18:17	108-95-2	
Pyrene	ND	ug/L	9.9	2.2	1	12/21/18 12:23	12/24/18 18:17	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	9.9	1.5	1	12/21/18 12:23	12/24/18 18:17	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	9.9	1.4	1	12/21/18 12:23	12/24/18 18:17	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	60	%	21-110		1	12/21/18 12:23	12/24/18 18:17	4165-60-0	
2-Fluorobiphenyl (S)	63	%	27-110		1	12/21/18 12:23	12/24/18 18:17	321-60-8	
Terphenyl-d14 (S)	28	%	31-107		1	12/21/18 12:23	12/24/18 18:17	1718-51-0	S0
Phenol-d6 (S)	19	%	10-110		1	12/21/18 12:23	12/24/18 18:17	13127-88-3	
2-Fluorophenol (S)	28	%	12-110		1	12/21/18 12:23	12/24/18 18:17	367-12-4	
2,4,6-Tribromophenol (S)	50	%	27-110		1	12/21/18 12:23	12/24/18 18:17	118-79-6	
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 13:59	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 13:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 13:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 13:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 13:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 13:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 13:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 13:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 13:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 13:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 13:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 13:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 13:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 13:59	106-43-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: EQB-01 **Lab ID: 92411780009** Collected: 12/19/18 16:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 13:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 13:59	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 13:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 13:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 13:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 13:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 13:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 13:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 13:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 13:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 13:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 13:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 13:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 13:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 13:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 13:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 13:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 13:59	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 13:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 13:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 13:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 13:59	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 13:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 13:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 13:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 13:59	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 13:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 13:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 13:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 13:59	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 13:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 13:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 13:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 13:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 13:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 13:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 13:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 13:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 13:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 13:59	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 13:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 13:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 13:59	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/27/18 13:59	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: EQB-01 **Lab ID: 92411780009** Collected: 12/19/18 16:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		12/27/18 13:59	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		12/27/18 13:59	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: TRIP BLANK **Lab ID: 92411780010** Collected: 12/19/18 00:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	25.0	10.0	1		12/27/18 14:15	67-64-1	
Benzene	ND	ug/L	1.0	0.25	1		12/27/18 14:15	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:15	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/27/18 14:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/27/18 14:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/27/18 14:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		12/27/18 14:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/27/18 14:15	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/27/18 14:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/27/18 14:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/27/18 14:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/27/18 14:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/27/18 14:15	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.35	1		12/27/18 14:15	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	2.0	1		12/27/18 14:15	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/27/18 14:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		12/27/18 14:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.21	1		12/27/18 14:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/27/18 14:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		12/27/18 14:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/27/18 14:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/27/18 14:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/27/18 14:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/27/18 14:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		12/27/18 14:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		12/27/18 14:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		12/27/18 14:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/27/18 14:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/27/18 14:15	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.12	1		12/27/18 14:15	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/27/18 14:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.71	1		12/27/18 14:15	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/27/18 14:15	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.31	1		12/27/18 14:15	99-87-6	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/27/18 14:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/27/18 14:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		12/27/18 14:15	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		12/27/18 14:15	91-20-3	
Styrene	ND	ug/L	1.0	0.26	1		12/27/18 14:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/27/18 14:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/27/18 14:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/27/18 14:15	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Sample: TRIP BLANK **Lab ID: 92411780010** Collected: 12/19/18 00:00 Received: 12/20/18 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260B								
Toluene	ND	ug/L	1.0	0.26	1		12/27/18 14:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.33	1		12/27/18 14:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.35	1		12/27/18 14:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/27/18 14:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/27/18 14:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/27/18 14:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/27/18 14:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/27/18 14:15	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/27/18 14:15	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/27/18 14:15	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.0	1		12/27/18 14:15	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/27/18 14:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/27/18 14:15	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		12/27/18 14:15	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		12/27/18 14:15	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		12/27/18 14:15	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

QC Batch: 449771 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009, 92411780010

METHOD BLANK: 2462062 Matrix: Water
Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009, 92411780010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.33	12/27/18 13:27	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.48	12/27/18 13:27	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.40	12/27/18 13:27	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.29	12/27/18 13:27	
1,1-Dichloroethane	ug/L	ND	1.0	0.32	12/27/18 13:27	
1,1-Dichloroethene	ug/L	ND	1.0	0.56	12/27/18 13:27	
1,1-Dichloropropene	ug/L	ND	1.0	0.49	12/27/18 13:27	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.33	12/27/18 13:27	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.41	12/27/18 13:27	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.35	12/27/18 13:27	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	2.0	12/27/18 13:27	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.30	12/27/18 13:27	
1,2-Dichloroethane	ug/L	ND	1.0	0.24	12/27/18 13:27	
1,2-Dichloropropane	ug/L	ND	1.0	0.27	12/27/18 13:27	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.24	12/27/18 13:27	
1,3-Dichloropropane	ug/L	ND	1.0	0.28	12/27/18 13:27	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.33	12/27/18 13:27	
2,2-Dichloropropane	ug/L	ND	1.0	0.13	12/27/18 13:27	
2-Butanone (MEK)	ug/L	ND	5.0	0.96	12/27/18 13:27	
2-Chlorotoluene	ug/L	ND	1.0	0.35	12/27/18 13:27	
2-Hexanone	ug/L	ND	5.0	0.46	12/27/18 13:27	
4-Chlorotoluene	ug/L	ND	1.0	0.31	12/27/18 13:27	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	0.33	12/27/18 13:27	
Acetone	ug/L	ND	25.0	10.0	12/27/18 13:27	
Benzene	ug/L	ND	1.0	0.25	12/27/18 13:27	
Bromobenzene	ug/L	ND	1.0	0.30	12/27/18 13:27	
Bromochloromethane	ug/L	ND	1.0	0.17	12/27/18 13:27	
Bromodichloromethane	ug/L	ND	1.0	0.18	12/27/18 13:27	
Bromoform	ug/L	ND	1.0	0.26	12/27/18 13:27	
Bromomethane	ug/L	ND	5.0	0.29	12/27/18 13:27	
Carbon tetrachloride	ug/L	ND	1.0	0.25	12/27/18 13:27	
Chlorobenzene	ug/L	ND	1.0	0.23	12/27/18 13:27	
Chloroethane	ug/L	ND	1.0	0.54	12/27/18 13:27	
Chloroform	ug/L	0.27J	1.0	0.14	12/27/18 13:27	
Chloromethane	ug/L	ND	1.0	0.11	12/27/18 13:27	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.19	12/27/18 13:27	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.13	12/27/18 13:27	
Dibromochloromethane	ug/L	ND	1.0	0.21	12/27/18 13:27	
Dibromomethane	ug/L	ND	1.0	0.21	12/27/18 13:27	
Dichlorodifluoromethane	ug/L	ND	1.0	0.21	12/27/18 13:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

METHOD BLANK: 2462062 Matrix: Water

Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009, 92411780010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	ND	1.0	0.12	12/27/18 13:27	
Ethylbenzene	ug/L	ND	1.0	0.30	12/27/18 13:27	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.71	12/27/18 13:27	
m&p-Xylene	ug/L	ND	2.0	0.66	12/27/18 13:27	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.21	12/27/18 13:27	
Methylene Chloride	ug/L	ND	2.0	0.97	12/27/18 13:27	
Naphthalene	ug/L	0.27J	1.0	0.24	12/27/18 13:27	
o-Xylene	ug/L	ND	1.0	0.23	12/27/18 13:27	
p-Isopropyltoluene	ug/L	ND	1.0	0.31	12/27/18 13:27	
Styrene	ug/L	ND	1.0	0.26	12/27/18 13:27	
Tetrachloroethene	ug/L	ND	1.0	0.46	12/27/18 13:27	
Toluene	ug/L	ND	1.0	0.26	12/27/18 13:27	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.49	12/27/18 13:27	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.26	12/27/18 13:27	
Trichloroethene	ug/L	ND	1.0	0.47	12/27/18 13:27	
Trichlorofluoromethane	ug/L	ND	1.0	0.20	12/27/18 13:27	
Vinyl acetate	ug/L	ND	2.0	0.35	12/27/18 13:27	
Vinyl chloride	ug/L	ND	1.0	0.62	12/27/18 13:27	
Xylene (Total)	ug/L	ND	1.0	1.0	12/27/18 13:27	
1,2-Dichloroethane-d4 (S)	%	97	70-130		12/27/18 13:27	
4-Bromofluorobenzene (S)	%	97	70-130		12/27/18 13:27	
Toluene-d8 (S)	%	102	70-130		12/27/18 13:27	

LABORATORY CONTROL SAMPLE: 2462063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.3	105	70-130	
1,1,1-Trichloroethane	ug/L	50	49.2	98	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.6	99	70-130	
1,1,2-Trichloroethane	ug/L	50	50.2	100	70-130	
1,1-Dichloroethane	ug/L	50	48.6	97	70-130	
1,1-Dichloroethene	ug/L	50	50.7	101	70-130	
1,1-Dichloropropene	ug/L	50	46.4	93	70-130	
1,2,3-Trichlorobenzene	ug/L	50	55.1	110	70-130	
1,2,3-Trichloropropane	ug/L	50	49.4	99	70-130	
1,2,4-Trichlorobenzene	ug/L	50	54.9	110	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.4	101	70-130	
1,2-Dichlorobenzene	ug/L	50	51.2	102	70-130	
1,2-Dichloroethane	ug/L	50	47.8	96	70-130	
1,2-Dichloropropane	ug/L	50	48.3	97	70-130	
1,3-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,3-Dichloropropane	ug/L	50	49.0	98	70-130	
1,4-Dichlorobenzene	ug/L	50	50.1	100	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

LABORATORY CONTROL SAMPLE: 2462063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	58.9	118	70-130	
2-Butanone (MEK)	ug/L	100	95.0	95	70-130	
2-Chlorotoluene	ug/L	50	50.0	100	70-130	
2-Hexanone	ug/L	100	100	100	70-130	
4-Chlorotoluene	ug/L	50	50.5	101	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	70-130	
Acetone	ug/L	100	89.9	90	70-130	
Benzene	ug/L	50	49.3	99	70-130	
Bromobenzene	ug/L	50	49.8	100	70-130	
Bromochloromethane	ug/L	50	49.4	99	70-130	
Bromodichloromethane	ug/L	50	50.9	102	70-130	
Bromoform	ug/L	50	49.0	98	70-130	
Bromomethane	ug/L	50	45.3	91	70-130	
Carbon tetrachloride	ug/L	50	49.8	100	70-130	
Chlorobenzene	ug/L	50	48.8	98	70-130	
Chloroethane	ug/L	50	44.0	88	70-130	
Chloroform	ug/L	50	45.1	90	70-130	
Chloromethane	ug/L	50	50.3	101	70-130	
cis-1,2-Dichloroethene	ug/L	50	48.2	96	70-130	
cis-1,3-Dichloropropene	ug/L	50	53.6	107	70-130	
Dibromochloromethane	ug/L	50	51.3	103	70-130	
Dibromomethane	ug/L	50	48.7	97	70-130	
Dichlorodifluoromethane	ug/L	50	48.1	96	70-130	
Diisopropyl ether	ug/L	50	48.4	97	70-130	
Ethylbenzene	ug/L	50	49.6	99	70-130	
Hexachloro-1,3-butadiene	ug/L	50	54.3	109	70-130	
m&p-Xylene	ug/L	100	100	100	70-130	
Methyl-tert-butyl ether	ug/L	50	48.0	96	70-130	
Methylene Chloride	ug/L	50	47.6	95	70-130	
Naphthalene	ug/L	50	53.0	106	70-130	
o-Xylene	ug/L	50	50.1	100	70-130	
p-Isopropyltoluene	ug/L	50	50.8	102	70-130	
Styrene	ug/L	50	51.1	102	70-130	
Tetrachloroethene	ug/L	50	48.5	97	70-130	
Toluene	ug/L	50	48.3	97	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.2	98	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.5	107	70-130	
Trichloroethene	ug/L	50	49.6	99	70-130	
Trichlorofluoromethane	ug/L	50	49.8	100	70-130	
Vinyl acetate	ug/L	100	102	102	70-130	
Vinyl chloride	ug/L	50	50.1	100	70-130	
Xylene (Total)	ug/L	150	150	100	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			98	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2462064 2462065

Parameter	Units	92411780006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	22.8	23.0	114	115	70-130	1	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	21.5	22.1	108	110	70-130	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	22.3	22.6	111	113	70-130	2	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	22.3	22.7	111	113	70-130	2	30	
1,1-Dichloroethane	ug/L	ND	20	20	20.8	21.7	104	108	70-130	4	30	
1,1-Dichloroethene	ug/L	ND	20	20	22.8	23.2	114	116	70-130	2	30	
1,1-Dichloropropene	ug/L	ND	20	20	20.7	20.9	103	104	70-130	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	21.7	24.0	108	120	70-130	10	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	22.7	23.0	114	115	70-130	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	22.6	24.7	113	123	70-130	9	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	20.1	22.2	101	111	70-130	10	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	21.9	22.9	109	114	70-130	4	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.4	20.9	102	104	70-130	2	30	
1,2-Dichloropropane	ug/L	ND	20	20	22.0	22.3	110	111	70-130	1	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	22.1	22.1	110	110	70-130	0	30	
1,3-Dichloropropane	ug/L	ND	20	20	22.6	22.4	113	112	70-130	1	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	22.1	22.8	110	114	70-130	3	30	
2,2-Dichloropropane	ug/L	ND	20	20	26.0	26.5	130	133	70-130	2	30	M1
2-Butanone (MEK)	ug/L	ND	40	40	43.2	45.5	108	114	70-130	5	30	
2-Chlorotoluene	ug/L	ND	20	20	21.3	22.7	107	114	70-130	6	30	
2-Hexanone	ug/L	ND	40	40	45.4	47.8	113	119	70-130	5	30	
4-Chlorotoluene	ug/L	ND	20	20	22.2	22.6	111	113	70-130	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	43.2	46.8	108	117	70-130	8	30	
Acetone	ug/L	ND	40	40	40.1	43.5	100	109	70-130	8	30	
Benzene	ug/L	ND	20	20	21.9	23.2	110	116	70-130	6	30	
Bromobenzene	ug/L	ND	20	20	21.2	22.3	106	111	70-130	5	30	
Bromochloromethane	ug/L	ND	20	20	21.8	22.2	109	111	70-130	2	30	
Bromodichloromethane	ug/L	ND	20	20	22.0	21.5	110	108	70-130	2	30	
Bromoform	ug/L	ND	20	20	20.2	20.3	101	102	70-130	0	30	
Bromomethane	ug/L	ND	20	20	19.1	18.9	95	95	70-130	1	30	
Carbon tetrachloride	ug/L	ND	20	20	22.2	23.2	111	116	70-130	4	30	
Chlorobenzene	ug/L	ND	20	20	22.0	22.2	110	111	70-130	1	30	
Chloroethane	ug/L	ND	20	20	19.9	18.2	99	91	70-130	9	30	
Chloroform	ug/L	ND	20	20	20.1	20.1	101	101	70-130	0	30	
Chloromethane	ug/L	ND	20	20	19.9	20.1	99	101	70-130	1	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.1	22.1	106	110	70-130	4	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	23.1	24.1	116	121	70-130	4	30	
Dibromochloromethane	ug/L	ND	20	20	22.0	22.5	110	113	70-130	2	30	
Dibromomethane	ug/L	ND	20	20	21.7	22.1	109	110	70-130	2	30	
Dichlorodifluoromethane	ug/L	ND	20	20	15.9	15.7	80	78	70-130	2	30	
Diisopropyl ether	ug/L	ND	20	20	20.9	21.2	105	106	70-130	1	30	
Ethylbenzene	ug/L	ND	20	20	22.6	22.7	113	114	70-130	1	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	24.9	24.9	124	125	70-130	0	30	
m&p-Xylene	ug/L	ND	40	40	45.9	46.2	115	116	70-130	1	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2462064 2462065

Parameter	Units	92411780006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methyl-tert-butyl ether	ug/L	ND	20	20	20.3	20.7	102	103	70-130	2	30	
Methylene Chloride	ug/L	ND	20	20	19.7	20.3	98	102	70-130	3	30	
Naphthalene	ug/L	ND	20	20	20.0	22.9	100	115	70-130	14	30	
o-Xylene	ug/L	ND	20	20	23.3	23.1	116	115	70-130	1	30	
p-Isopropyltoluene	ug/L	ND	20	20	23.0	23.7	115	118	70-130	3	30	
Styrene	ug/L	ND	20	20	22.5	22.8	113	114	70-130	1	30	
Tetrachloroethene	ug/L	ND	20	20	21.8	21.9	109	110	70-130	1	30	
Toluene	ug/L	ND	20	20	21.5	22.4	107	112	70-130	4	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.9	22.5	110	113	70-130	3	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	22.3	23.1	112	115	70-130	3	30	
Trichloroethene	ug/L	ND	20	20	21.8	22.3	109	112	70-130	3	30	
Trichlorofluoromethane	ug/L	ND	20	20	22.9	22.9	114	114	70-130	0	30	
Vinyl acetate	ug/L	ND	40	40	44.0	45.8	110	115	70-130	4	30	
Vinyl chloride	ug/L	ND	20	20	21.3	21.5	107	107	70-130	1	30	
Xylene (Total)	ug/L	ND	60	60	69.2	69.3	115	115	70-130	0	30	
1,2-Dichloroethane-d4 (S)	%						95	94	70-130			
4-Bromofluorobenzene (S)	%						101	99	70-130			
Toluene-d8 (S)	%						99	100	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

QC Batch: 449049 Analysis Method: EPA 8270D
QC Batch Method: EPA 3510C Analysis Description: 8270 Water MSSV SC
Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009

METHOD BLANK: 2459225 Matrix: Water
Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	1.4	12/24/18 10:38	
1,2-Dichlorobenzene	ug/L	ND	10.0	1.5	12/24/18 10:38	
1,3-Dichlorobenzene	ug/L	ND	10.0	1.4	12/24/18 10:38	
1,4-Dichlorobenzene	ug/L	ND	10.0	1.4	12/24/18 10:38	
1-Methylnaphthalene	ug/L	ND	10.0	1.4	12/24/18 10:38	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	1.8	12/24/18 10:38	
2,4,5-Trichlorophenol	ug/L	ND	10.0	1.5	12/24/18 10:38	
2,4,6-Trichlorophenol	ug/L	ND	10.0	1.4	12/24/18 10:38	
2,4-Dichlorophenol	ug/L	ND	10.0	1.6	12/24/18 10:38	
2,4-Dimethylphenol	ug/L	ND	10.0	1.6	12/24/18 10:38	
2,4-Dinitrophenol	ug/L	ND	50.0	5.1	12/24/18 10:38	
2,4-Dinitrotoluene	ug/L	ND	10.0	1.5	12/24/18 10:38	
2,6-Dinitrotoluene	ug/L	ND	10.0	1.4	12/24/18 10:38	
2-Chloronaphthalene	ug/L	ND	10.0	1.6	12/24/18 10:38	
2-Chlorophenol	ug/L	ND	10.0	1.5	12/24/18 10:38	
2-Methylnaphthalene	ug/L	ND	10.0	1.4	12/24/18 10:38	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	1.6	12/24/18 10:38	
2-Nitroaniline	ug/L	ND	50.0	2.3	12/24/18 10:38	
2-Nitrophenol	ug/L	ND	10.0	1.6	12/24/18 10:38	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	1.4	12/24/18 10:38	
3,3'-Dichlorobenzidine	ug/L	ND	50.0	3.9	12/24/18 10:38	
3-Nitroaniline	ug/L	ND	50.0	2.7	12/24/18 10:38	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	2.2	12/24/18 10:38	
4-Bromophenylphenyl ether	ug/L	ND	10.0	1.5	12/24/18 10:38	
4-Chloro-3-methylphenol	ug/L	ND	20.0	2.8	12/24/18 10:38	
4-Chloroaniline	ug/L	ND	50.0	2.8	12/24/18 10:38	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	1.6	12/24/18 10:38	
4-Nitroaniline	ug/L	ND	50.0	3.4	12/24/18 10:38	
4-Nitrophenol	ug/L	ND	50.0	4.3	12/24/18 10:38	
Acenaphthene	ug/L	ND	10.0	1.6	12/24/18 10:38	
Acenaphthylene	ug/L	ND	10.0	1.5	12/24/18 10:38	
Aniline	ug/L	ND	10.0	1.2	12/24/18 10:38	
Anthracene	ug/L	ND	10.0	1.7	12/24/18 10:38	
Benzo(a)anthracene	ug/L	ND	10.0	2.1	12/24/18 10:38	
Benzo(a)pyrene	ug/L	ND	10.0	2.2	12/24/18 10:38	
Benzo(b)fluoranthene	ug/L	ND	10.0	2.2	12/24/18 10:38	
Benzo(g,h,i)perylene	ug/L	ND	10.0	2.1	12/24/18 10:38	
Benzo(k)fluoranthene	ug/L	ND	10.0	2.0	12/24/18 10:38	
Benzoic Acid	ug/L	ND	50.0	5.0	12/24/18 10:38	
Benzyl alcohol	ug/L	ND	20.0	3.1	12/24/18 10:38	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

METHOD BLANK: 2459225 Matrix: Water
Associated Lab Samples: 92411780001, 92411780002, 92411780003, 92411780004, 92411780005, 92411780006, 92411780007, 92411780008, 92411780009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	1.6	12/24/18 10:38	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	1.7	12/24/18 10:38	
bis(2-Ethylhexyl)phthalate	ug/L	ND	6.0	2.3	12/24/18 10:38	
Butylbenzylphthalate	ug/L	ND	10.0	2.5	12/24/18 10:38	
Chrysene	ug/L	ND	10.0	2.1	12/24/18 10:38	
Di-n-butylphthalate	ug/L	ND	10.0	2.0	12/24/18 10:38	
Di-n-octylphthalate	ug/L	ND	10.0	1.5	12/24/18 10:38	
Dibenz(a,h)anthracene	ug/L	ND	10.0	2.0	12/24/18 10:38	
Dibenzofuran	ug/L	ND	10.0	1.7	12/24/18 10:38	
Diethylphthalate	ug/L	ND	10.0	1.6	12/24/18 10:38	
Dimethylphthalate	ug/L	ND	10.0	1.4	12/24/18 10:38	
Fluoranthene	ug/L	ND	10.0	2.2	12/24/18 10:38	
Fluorene	ug/L	ND	10.0	1.6	12/24/18 10:38	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	1.6	12/24/18 10:38	
Hexachlorobenzene	ug/L	ND	10.0	1.7	12/24/18 10:38	
Hexachlorocyclopentadiene	ug/L	ND	10.0	1.3	12/24/18 10:38	
Hexachloroethane	ug/L	ND	10.0	1.8	12/24/18 10:38	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	2.0	12/24/18 10:38	
Isophorone	ug/L	ND	10.0	1.5	12/24/18 10:38	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	1.7	12/24/18 10:38	
N-Nitrosodimethylamine	ug/L	ND	10.0	1.6	12/24/18 10:38	
N-Nitrosodiphenylamine	ug/L	ND	10.0	1.4	12/24/18 10:38	
Naphthalene	ug/L	ND	10.0	1.4	12/24/18 10:38	
Nitrobenzene	ug/L	ND	10.0	1.6	12/24/18 10:38	
Pentachlorophenol	ug/L	ND	50.0	3.5	12/24/18 10:38	
Phenanthrene	ug/L	ND	10.0	1.6	12/24/18 10:38	
Phenol	ug/L	ND	10.0	1.3	12/24/18 10:38	
Pyrene	ug/L	ND	10.0	2.2	12/24/18 10:38	
2,4,6-Tribromophenol (S)	%	79	27-110		12/24/18 10:38	
2-Fluorobiphenyl (S)	%	61	27-110		12/24/18 10:38	
2-Fluorophenol (S)	%	31	12-110		12/24/18 10:38	
Nitrobenzene-d5 (S)	%	58	21-110		12/24/18 10:38	
Phenol-d6 (S)	%	20	10-110		12/24/18 10:38	
Terphenyl-d14 (S)	%	73	31-107		12/24/18 10:38	

LABORATORY CONTROL SAMPLE: 2459226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	34.2	68	70-130	
1,2-Dichlorobenzene	ug/L	50	29.7	59	70-130	
1,3-Dichlorobenzene	ug/L	50	28.4	57	70-130	
1,4-Dichlorobenzene	ug/L	50	30.9	62	70-130	
1-Methylnaphthalene	ug/L	50	37.8	76	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

LABORATORY CONTROL SAMPLE: 2459226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/L	50	26.8	54	70-130	
2,4,5-Trichlorophenol	ug/L	50	33.6	67	70-130	
2,4,6-Trichlorophenol	ug/L	50	36.1	72	70-130	
2,4-Dichlorophenol	ug/L	50	33.0	66	70-130	
2,4-Dimethylphenol	ug/L	50	29.3	59	70-130	
2,4-Dinitrophenol	ug/L	250	171	69	70-130	
2,4-Dinitrotoluene	ug/L	50	42.1	84	70-130	
2,6-Dinitrotoluene	ug/L	50	42.8	86	70-130	
2-Chloronaphthalene	ug/L	50	35.1	70	70-130	
2-Chlorophenol	ug/L	50	26.7	53	70-130	
2-Methylnaphthalene	ug/L	50	38.5	77	70-130	
2-Methylphenol(o-Cresol)	ug/L	50	23.8	48	70-130	
2-Nitroaniline	ug/L	100	67.2	67	70-130	
2-Nitrophenol	ug/L	50	33.5	67	70-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	21.2	42	70-130	
3,3'-Dichlorobenzidine	ug/L	100	73.4	73	70-130	
3-Nitroaniline	ug/L	100	71.2	71	70-130	
4,6-Dinitro-2-methylphenol	ug/L	100	90.5	91	70-130	
4-Bromophenylphenyl ether	ug/L	50	44.5	89	70-130	
4-Chloro-3-methylphenol	ug/L	100	64.9	65	70-130	
4-Chloroaniline	ug/L	100	64.6	65	70-130	
4-Chlorophenylphenyl ether	ug/L	50	40.9	82	70-130	
4-Nitroaniline	ug/L	100	74.4	74	70-130	
4-Nitrophenol	ug/L	250	83.8	34	70-130	
Acenaphthene	ug/L	50	38.9	78	70-130	
Acenaphthylene	ug/L	50	41.1	82	70-130	
Aniline	ug/L	50	26.3	53	70-130	
Anthracene	ug/L	50	44.0	88	70-130	
Benzo(a)anthracene	ug/L	50	43.8	88	70-130	
Benzo(a)pyrene	ug/L	50	45.1	90	70-130	
Benzo(b)fluoranthene	ug/L	50	43.9	88	70-130	
Benzo(g,h,i)perylene	ug/L	50	46.8	94	70-130	
Benzo(k)fluoranthene	ug/L	50	45.2	90	70-130	
Benzoic Acid	ug/L	250	30.2J	12	70-130	
Benzyl alcohol	ug/L	100	55.4	55	70-130	
bis(2-Chloroethoxy)methane	ug/L	50	34.3	69	70-130	
bis(2-Chloroethyl) ether	ug/L	50	31.5	63	70-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	39.2	78	70-130	
Butylbenzylphthalate	ug/L	50	38.4	77	70-130	
Chrysene	ug/L	50	43.5	87	70-130	
Di-n-butylphthalate	ug/L	50	40.9	82	70-130	
Di-n-octylphthalate	ug/L	50	42.6	85	70-130	
Dibenz(a,h)anthracene	ug/L	50	47.3	95	70-130	
Dibenzofuran	ug/L	50	38.5	77	70-130	
Diethylphthalate	ug/L	50	40.3	81	70-130	
Dimethylphthalate	ug/L	50	39.3	79	70-130	
Fluoranthene	ug/L	50	48.1	96	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

LABORATORY CONTROL SAMPLE: 2459226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluorene	ug/L	50	42.0	84	70-130	
Hexachloro-1,3-butadiene	ug/L	50	33.2	66	70-130	
Hexachlorobenzene	ug/L	50	45.5	91	70-130	
Hexachlorocyclopentadiene	ug/L	50	32.1	64	70-130	
Hexachloroethane	ug/L	50	29.0	58	70-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	48.3	97	70-130	
Isophorone	ug/L	50	33.1	66	70-130	
N-Nitroso-di-n-propylamine	ug/L	50	31.5	63	70-130	
N-Nitrosodimethylamine	ug/L	50	20.2	40	70-130	
N-Nitrosodiphenylamine	ug/L	50	40.0	80	70-130	
Naphthalene	ug/L	50	36.5	73	70-130	
Nitrobenzene	ug/L	50	35.0	70	70-130	
Pentachlorophenol	ug/L	100	79.0	79	70-130	
Phenanthrene	ug/L	50	43.6	87	70-130	
Phenol	ug/L	50	15.3	31	70-130	1g,3g
Pyrene	ug/L	50	42.0	84	70-130	
2,4,6-Tribromophenol (S)	%			86	27-110	
2-Fluorobiphenyl (S)	%			66	27-110	
2-Fluorophenol (S)	%			34	12-110	
Nitrobenzene-d5 (S)	%			64	21-110	
Phenol-d6 (S)	%			24	10-110	
Terphenyl-d14 (S)	%			60	31-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2459227 2459228

Parameter	Units	92411780006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	4.7	47.2	2.5	35.2	53	75	70-130	174	30	
1,2-Dichlorobenzene	ug/L	ND	4.7	47.2	2.0	30.8	44	65	70-130	175	30	
1,3-Dichlorobenzene	ug/L	ND	4.7	47.2	2.0	29.7	44	63	70-130	174	30	
1,4-Dichlorobenzene	ug/L	ND	4.7	47.2	2.1	31.7	46	67	70-130	175	30	
1-Methylnaphthalene	ug/L	ND	4.7	47.2	3.2	39.4	68	83	70-130	170	30	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	4.7	47.2	1.8	27.1	40	57	70-130	174	30	
2,4,5-Trichlorophenol	ug/L	ND	4.7	47.2	3.3	37.1	72	79	70-130	167	30	
2,4,6-Trichlorophenol	ug/L	ND	4.7	47.2	3.5	39.5	75	84	70-130	168	30	
2,4-Dichlorophenol	ug/L	ND	4.7	47.2	2.9	34.8	61	74	70-130	170	30	
2,4-Dimethylphenol	ug/L	ND	4.7	47.2	2.4	29.3	53	62	70-130	169	3	
2,4-Dinitrophenol	ug/L	ND	23.3	236	16.9	187	73	79	70-130	167	30	
2,4-Dinitrotoluene	ug/L	ND	4.7	47.2	4.1	43.0	88	91	70-130	165	30	
2,6-Dinitrotoluene	ug/L	ND	4.7	47.2	4.1	44.2	88	94	70-130	166	30	
2-Chloronaphthalene	ug/L	ND	4.7	47.2	3.1	36.1	67	77	70-130	168	30	
2-Chlorophenol	ug/L	ND	4.7	47.2	1.8	26.8	39	57	70-130	174	30	
2-Methylnaphthalene	ug/L	ND	4.7	47.2	3.2	39.3	68	83	70-130	170	30	
2-Methylphenol(o-Cresol)	ug/L	ND	4.7	47.2	1.7	22.9	36	49	70-130	173	30	
2-Nitroaniline	ug/L	ND	9.3	94.3	6.6	70.0	71	74	70-130	166	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2459227 2459228

Parameter	Units	92411780006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Nitrophenol	ug/L	ND	4.7	47.2	2.7	36.0	59	76	70-130	172	30	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	4.7	47.2	1.6	19.7	34	42	70-130	171	30	
3,3'-Dichlorobenzidine	ug/L	ND	9.3	94.3	6.8	70.0	73	74	70-130	165	30	
3-Nitroaniline	ug/L	ND	9.3	94.3	6.5	65.7	70	70	70-130	164	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	9.3	94.3	9.3	99.0	100	105	70-130	166	30	
4-Bromophenylphenyl ether	ug/L	ND	4.7	47.2	4.2	43.6	89	93	70-130	165	30	
4-Chloro-3-methylphenol	ug/L	ND	9.3	94.3	6.3	68.1	67	72	70-130	166	30	
4-Chloroaniline	ug/L	ND	9.3	94.3	5.2	57.2	56	61	70-130	166	30	
4-Chlorophenylphenyl ether	ug/L	ND	4.7	47.2	3.9	41.7	83	88	70-130	166	30	
4-Nitroaniline	ug/L	ND	9.3	94.3	7.1	73.1	76	77	70-130	165	30	
4-Nitrophenol	ug/L	ND	23.3	236	7.2	75.8	31	32	70-130	165	30	
Acenaphthene	ug/L	ND	4.7	47.2	3.6	40.2	77	85	70-130	167	30	
Acenaphthylene	ug/L	ND	4.7	47.2	3.8	42.1	81	89	70-130	167	30	
Aniline	ug/L	ND	4.7	47.2	1.7	22.0	36	47	70-130	172	30	
Anthracene	ug/L	ND	4.7	47.2	4.2	43.1	89	91	70-130	165	30	
Benzo(a)anthracene	ug/L	ND	4.7	47.2	4.2	43.9	91	93	70-130	165	30	
Benzo(a)pyrene	ug/L	ND	4.7	47.2	4.5	46.0	96	98	70-130	164	30	
Benzo(b)fluoranthene	ug/L	ND	4.7	47.2	4.4	44.5	94	94	70-130	164	30	
Benzo(g,h,i)perylene	ug/L	ND	4.7	47.2	4.7	47.2	102	100	70-130	164	30	
Benzo(k)fluoranthene	ug/L	ND	4.7	47.2	4.4	44.2	95	94	70-130	164	30	
Benzoic Acid	ug/L	ND	23.3	236	2.4J	34.1J	10	14	70-130		0	
Benzyl alcohol	ug/L	ND	9.3	94.3	3.9	51.2	41	54	70-130	172	30	
bis(2-Chloroethoxy)methane	ug/L	ND	4.7	47.2	2.7	34.6	58	73	70-130	171	30	
bis(2-Chloroethyl) ether	ug/L	ND	4.7	47.2	2.1	31.4	45	67	70-130	175	30	
bis(2-Ethylhexyl)phthalate	ug/L	ND	4.7	47.2	3.8	40.3	83	85	70-130	165	30	
Butylbenzylphthalate	ug/L	ND	4.7	47.2	3.9	40.3	83	85	70-130	165	30	
Chrysene	ug/L	ND	4.7	47.2	4.2	43.2	90	92	70-130	165	30	
Di-n-butylphthalate	ug/L	ND	4.7	47.2	4.0	41.5	87	88	70-130	165	30	
Di-n-octylphthalate	ug/L	ND	4.7	47.2	4.2	42.8	91	91	70-130	164	30	
Dibenz(a,h)anthracene	ug/L	ND	4.7	47.2	4.7	47.7	100	101	70-130	164	30	
Dibenzofuran	ug/L	ND	4.7	47.2	3.6	39.4	78	84	70-130	166	30	
Diethylphthalate	ug/L	ND	4.7	47.2	3.9	42.0	84	89	70-130	166	30	
Dimethylphthalate	ug/L	ND	4.7	47.2	3.8	40.1	82	85	70-130	165	30	
Fluoranthene	ug/L	ND	4.7	47.2	4.7	47.9	100	102	70-130	164	30	
Fluorene	ug/L	ND	4.7	47.2	4.0	43.3	86	92	70-130	166	30	
Hexachloro-1,3-butadiene	ug/L	ND	4.7	47.2	2.5	36.0	53	76	70-130	174	30	
Hexachlorobenzene	ug/L	ND	4.7	47.2	4.3	45.3	93	96	70-130	165	30	
Hexachlorocyclopentadiene	ug/L	ND	4.7	47.2	2.6	35.7	55	76	70-130	173	30	
Hexachloroethane	ug/L	ND	4.7	47.2	1.9	30.6	41	65	70-130	176	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	4.7	47.2	4.8	46.9	103	99	70-130	163	30	
Isophorone	ug/L	ND	4.7	47.2	2.9	33.0	62	70	70-130	168	30	
N-Nitroso-di-n-propylamine	ug/L	ND	4.7	47.2	2.6	32.1	55	68	70-130	170	30	
N-Nitrosodimethylamine	ug/L	ND	4.7	47.2	1.5	20.5	31	44	70-130	174	30	
N-Nitrosodiphenylamine	ug/L	ND	4.7	47.2	3.8	39.2	83	83	70-130	164	30	
Naphthalene	ug/L	ND	4.7	47.2	2.7	37.1	58	79	70-130	173	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2459227 2459228

Parameter	Units	92411780006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrobenzene	ug/L	ND	4.7	47.2	2.6	34.3	55	73	70-130	172	30	
Pentachlorophenol	ug/L	ND	9.3	94.3	7.8	79.7	83	85	70-130	164	30	
Phenanthrene	ug/L	ND	4.7	47.2	4.3	43.9	92	93	70-130	165	30	
Phenol	ug/L	ND	4.7	47.2	0.96	13.4	21	28	70-130	173	30	2g
Pyrene	ug/L	ND	4.7	47.2	4.1	42.4	89	90	70-130	164	30	
2,4,6-Tribromophenol (S)	%						93	96	27-110			
2-Fluorobiphenyl (S)	%						63	72	27-110			
2-Fluorophenol (S)	%						22	32	12-110			
Nitrobenzene-d5 (S)	%						51	68	21-110			
Phenol-d6 (S)	%						16	22	10-110			
Terphenyl-d14 (S)	%						70	67	31-107			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

1g	Comment applies to all compounds outside control limits.
2g	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
3g	Footnote applies to all recoveries exceeding QC limits. Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S0	Surrogate recovery outside laboratory control limits.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Former Bramlette MGP J18120520
Pace Project No.: 92411780

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92411780001	**SW-7**	EPA 3510C	449049	EPA 8270D	449378
92411780002	**SW-8**	EPA 3510C	449049	EPA 8270D	449378
92411780003	**SW-9**	EPA 3510C	449049	EPA 8270D	449378
92411780004	**SW-10**	EPA 3510C	449049	EPA 8270D	449378
92411780005	**SW-11**	EPA 3510C	449049	EPA 8270D	449378
92411780006	**SW-12 MS/MSD**	EPA 3510C	449049	EPA 8270D	449378
92411780007	**SW-DUP1**	EPA 3510C	449049	EPA 8270D	449378
92411780008	**FB-01**	EPA 3510C	449049	EPA 8270D	449378
92411780009	**EQB-01**	EPA 3510C	449049	EPA 8270D	449378
92411780001	**SW-7**	EPA 8260B	449771		
92411780002	**SW-8**	EPA 8260B	449771		
92411780003	**SW-9**	EPA 8260B	449771		
92411780004	**SW-10**	EPA 8260B	449771		
92411780005	**SW-11**	EPA 8260B	449771		
92411780006	**SW-12 MS/MSD**	EPA 8260B	449771		
92411780007	**SW-DUP1**	EPA 8260B	449771		
92411780008	**FB-01**	EPA 8260B	449771		
92411780009	**EQB-01**	EPA 8260B	449771		
92411780010	**TRIP BLANK**	EPA 8260B	449771		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville [X] Eden [ ] Greenwood [ ] Huntersville [ ] Raleigh [ ] Mechanicsville [ ]

Sample Condition Upon Receipt

Client Name: Synterra

Project #: WO#: 92411780

Courier: [ ] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [X] Pace [ ] Other:____

Custody Seal Present? [ ] Yes [X] No Seals Intact? [ ] Yes [X] No

Date/Initials Person Examining Contents: 12/20 AR

Packing Material: [ ] Bubble Wrap [X] Bubble Bags [ ] None [ ] Other

Biological Tissue Frozen? [ ] Yes [ ] No [X] N/A

Thermometer: [X] IR Gun ID: 93-T046 Type of Ice: [X] Wet [ ] Blue [ ] None

Cooler Temp (°C): 5.2/4.8/5.5 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 5.2/4.8/5.5

Temp should be above freezing to 6°C
[ ] Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (~~[X] N/A~~, water sample) AR 12/20

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? [X] Yes ~~[ ] No~~ AR 12/20

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [X] No

				Comments/Discrepancy:
Chain of Custody Present?	[X] Yes	[ ] No	[ ] N/A	1.
Samples Arrived within Hold Time?	[X] Yes	[ ] No	[ ] N/A	2.
Short Hold Time Analysis (<72 hr.)?	[ ] Yes	[X] No	[ ] N/A	3.
Rush Turn Around Time Requested?	[ ] Yes	[X] No	[ ] N/A	4.
Sufficient Volume?	[X] Yes	[ ] No	[ ] N/A	5.
Correct Containers Used?	[X] Yes	[ ] No	[ ] N/A	6.
-Pace Containers Used?	[X] Yes	[ ] No	[ ] N/A	
Containers Intact?	[X] Yes	[ ] No	[ ] N/A	7.
Dissolved analysis: Samples Field Filtered?	[ ] Yes	[ ] No	[X] N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	[X] Yes	[ ] No	[ ] N/A	9.
Headspace in VOA Vials (>5-6mm)?	[ ] Yes	[X] No	[ ] N/A	10.
Trip Blank Present?	[X] Yes	[ ] No	[ ] N/A	11.
Trip Blank Custody Seals Present?	[X] Yes	[ ] No	[ ] N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? [ ] Yes [ ] No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO#: 92411780

PM: KLH1 Due Date: 12/28/18

CLIENT: 92-Duke Ener

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1											2					3													
2											2					3													
3											2					3													
4											2					3													
5											2					3													
6											2					3													
7											2					3													
8											2					3													
9											2					3													
10											2					3													
11																2													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Synterra	Report To:	Heather Smith	Attention:	
Address:	148 River street	Copy To:		Company Name:	
Suite 220, Greenville, SC 29601				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Bramlette MGP Site	Pace Project Manager:	kevin.herring@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	7754

Regulatory Agency

State / Location: SC

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260	8270 SVOC	Trip BLANK	Residual Chlorine (Y/N)	924178
1	SW-7	WT	G	12-19-18	1430	12-19	1430	10	5				5						3	2			001
2	SW-8	WT	G	12-19-18	1400	12-19	1400	11															002
3	SW-9						1325	9															003
4	SW-10						1250	10															004
5	SW-11						1145	9															005
6	SW-12 (TDP)					(TDP)	1030	8															006
7	SW-[redacted] DUP1					0900	[redacted]	8															007
8	SW-12 MS/MSD						1030	8															008
9	FB-01						1500	15															009
10	EQB-01						1600	16															010
11	Trip Blank						—	—	2				2							02			
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/20/18	1115		12/20/18	1115				
		12-20-18	1505		12-20-18	1510	4.3 / 5.5	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Spillane

SIGNATURE of SAMPLER:

DATE Signed: 12-19-18

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

January 08, 2019

Program Manager
Duke Energy
13339 Hagers Ferry Road
Bldg. 7405 MG30A2
Huntersville, NC 28078

RE: Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Dear Program Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Program Manager, Duke Energy
Mike Mastbaum
Todd Plating, Synterra
Rick Powell
B. Russo
Heather Smith

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92411773001	**SW-7-SED**	Solid	12/19/18 14:30	12/20/18 11:15
92411773002	**SW-8-SED**	Solid	12/19/18 14:00	12/20/18 11:15
92411773003	**SW-9-SED**	Solid	12/19/18 13:25	12/20/18 11:15
92411773004	**SW-10-SED**	Solid	12/19/18 12:50	12/20/18 11:15
92411773005	**SW-11-SED**	Solid	12/19/18 11:45	12/20/18 11:15
92411773006	**SW-DUP1-SED**	Solid	12/19/18 09:00	12/20/18 11:15
92411773007	**SW-12 MS/MSD-SED**	Solid	12/19/18 10:30	12/20/18 11:15

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92411773001	**SW-7-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773002	**SW-8-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773003	**SW-9-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773004	**SW-10-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773005	**SW-11-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773006	**SW-DUP1-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92411773007	**SW-12 MS/MSD-SED**	EPA 8270D	BPJ	74	PASI-C
		EPA 8260B	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C

Pace Analytical Services, LLC
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(704)875-9092

SUMMARY OF DETECTION

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92411773001	**SW-7-SED**					
EPA 8270D	Fluoranthene	106J	ug/kg	451	12/24/18 10:36	
EPA 8270D	Pyrene	90.0J	ug/kg	451	12/24/18 10:36	
ASTM D2974-87	Percent Moisture	26.9	%	0.10	12/21/18 16:51	
92411773002	**SW-8-SED**					
ASTM D2974-87	Percent Moisture	21.4	%	0.10	12/21/18 16:51	
92411773003	**SW-9-SED**					
ASTM D2974-87	Percent Moisture	20.7	%	0.10	12/21/18 16:51	
92411773004	**SW-10-SED**					
ASTM D2974-87	Percent Moisture	20.6	%	0.10	12/21/18 16:51	
92411773005	**SW-11-SED**					
ASTM D2974-87	Percent Moisture	26.7	%	0.10	12/21/18 16:51	
92411773006	**SW-DUP1-SED**					
EPA 8270D	Benzo(a)anthracene	145J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Benzo(a)pyrene	162J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Benzo(b)fluoranthene	213J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Benzo(g,h,i)perylene	124J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Benzo(k)fluoranthene	92.0J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Chrysene	141J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Fluoranthene	230J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Indeno(1,2,3-cd)pyrene	104J	ug/kg	419	12/24/18 12:55	
EPA 8270D	Pyrene	197J	ug/kg	419	12/24/18 12:55	
ASTM D2974-87	Percent Moisture	20.1	%	0.10	12/21/18 16:51	
92411773007	**SW-12 MS/MSD-SED**					
EPA 8270D	Acenaphthylene	106J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Anthracene	167J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Benzo(a)anthracene	503	ug/kg	411	12/26/18 13:19	
EPA 8270D	Benzo(a)pyrene	435	ug/kg	411	12/26/18 13:19	
EPA 8270D	Benzo(b)fluoranthene	562	ug/kg	411	12/26/18 13:19	
EPA 8270D	Benzo(g,h,i)perylene	183J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Benzo(k)fluoranthene	236J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Chrysene	490	ug/kg	411	12/26/18 13:19	
EPA 8270D	Fluoranthene	822	ug/kg	411	12/26/18 13:19	
EPA 8270D	Indeno(1,2,3-cd)pyrene	186J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Phenanthrene	217J	ug/kg	411	12/26/18 13:19	
EPA 8270D	Pyrene	791	ug/kg	411	12/26/18 13:19	
ASTM D2974-87	Percent Moisture	20.3	%	0.10	12/21/18 16:52	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Method: **EPA 8270D**
Description: 8270 MSSV Microwave SC
Client: Duke Energy
Date: January 08, 2019

General Information:
7 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 449206

1g: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Footnote applies to all recoveries exceeding QC limits.

- MS (Lab ID: 2460020)
  - Phenol
- MSD (Lab ID: 2460021)
  - Phenol

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Method: **EPA 8270D**
Description: 8270 MSSV Microwave SC
Client: Duke Energy
Date: January 08, 2019

Analyte Comments:

QC Batch: 449206

2g: Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits.

Footnote applies to all recoveries less than 70%.

- LCS (Lab ID: 2460019)
  - Phenol

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Method: **EPA 8260B**
Description: 8260/5035A SC Volatile Org
Client: Duke Energy
Date: January 08, 2019

General Information:
7 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 449048

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2459220)
  - Tetrachloroethene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 449048

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92411773007

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2459221)
  - Tetrachloroethene
- MSD (Lab ID: 2459222)
  - Tetrachloroethene

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Method: **EPA 8260B**
Description: 8260/5035A SC Volatile Org
Client: Duke Energy
Date: January 08, 2019

QC Batch: 449048

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92411773007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2459221)
  - 1,2,3-Trichlorobenzene
  - 1,2,4-Trichlorobenzene
  - 1,4-Dichlorobenzene
  - 2-Hexanone
  - Bromoform
  - Hexachloro-1,3-butadiene
  - Naphthalene
  - Styrene
  - Vinyl acetate
  - n-Butylbenzene
  - o-Xylene
  - p-Isopropyltoluene
- MSD (Lab ID: 2459222)
  - 1,2,3-Trichlorobenzene
  - 2-Hexanone
  - Naphthalene
  - p-Isopropyltoluene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2459222)
  - 1,2,3-Trichlorobenzene
  - 1,2,4-Trichlorobenzene
  - Hexachloro-1,3-butadiene
  - Styrene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-7-SED **Lab ID: 92411773001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	451	104	1	12/21/18 19:38	12/24/18 10:36	83-32-9	
Acenaphthylene	ND	ug/kg	451	107	1	12/21/18 19:38	12/24/18 10:36	208-96-8	
Aniline	ND	ug/kg	451	122	1	12/21/18 19:38	12/24/18 10:36	62-53-3	
Anthracene	ND	ug/kg	451	101	1	12/21/18 19:38	12/24/18 10:36	120-12-7	
Benzo(a)anthracene	ND	ug/kg	451	83.4	1	12/21/18 19:38	12/24/18 10:36	56-55-3	
Benzo(a)pyrene	ND	ug/kg	451	86.2	1	12/21/18 19:38	12/24/18 10:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	451	78.0	1	12/21/18 19:38	12/24/18 10:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	451	115	1	12/21/18 19:38	12/24/18 10:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	451	88.9	1	12/21/18 19:38	12/24/18 10:36	207-08-9	
Benzoic Acid	ND	ug/kg	2260	82.1	1	12/21/18 19:38	12/24/18 10:36	65-85-0	
Benzyl alcohol	ND	ug/kg	903	90.3	1	12/21/18 19:38	12/24/18 10:36	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	451	82.1	1	12/21/18 19:38	12/24/18 10:36	101-55-3	
Butylbenzylphthalate	ND	ug/kg	451	95.8	1	12/21/18 19:38	12/24/18 10:36	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	903	93.0	1	12/21/18 19:38	12/24/18 10:36	59-50-7	
4-Chloroaniline	ND	ug/kg	2260	126	1	12/21/18 19:38	12/24/18 10:36	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	451	105	1	12/21/18 19:38	12/24/18 10:36	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	451	115	1	12/21/18 19:38	12/24/18 10:36	111-44-4	
2-Chloronaphthalene	ND	ug/kg	451	88.9	1	12/21/18 19:38	12/24/18 10:36	91-58-7	
2-Chlorophenol	ND	ug/kg	451	123	1	12/21/18 19:38	12/24/18 10:36	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	451	93.0	1	12/21/18 19:38	12/24/18 10:36	7005-72-3	
Chrysene	ND	ug/kg	451	60.2	1	12/21/18 19:38	12/24/18 10:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	451	95.8	1	12/21/18 19:38	12/24/18 10:36	53-70-3	
Dibenzofuran	ND	ug/kg	451	73.9	1	12/21/18 19:38	12/24/18 10:36	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	451	120	1	12/21/18 19:38	12/24/18 10:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	451	103	1	12/21/18 19:38	12/24/18 10:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	451	127	1	12/21/18 19:38	12/24/18 10:36	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2260	98.5	1	12/21/18 19:38	12/24/18 10:36	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	451	98.5	1	12/21/18 19:38	12/24/18 10:36	120-83-2	
Diethylphthalate	ND	ug/kg	451	69.8	1	12/21/18 19:38	12/24/18 10:36	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	451	178	1	12/21/18 19:38	12/24/18 10:36	105-67-9	
Dimethylphthalate	ND	ug/kg	451	91.7	1	12/21/18 19:38	12/24/18 10:36	131-11-3	
Di-n-butylphthalate	ND	ug/kg	451	73.9	1	12/21/18 19:38	12/24/18 10:36	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	903	90.3	1	12/21/18 19:38	12/24/18 10:36	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2260	73.9	1	12/21/18 19:38	12/24/18 10:36	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	451	84.8	1	12/21/18 19:38	12/24/18 10:36	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	451	94.4	1	12/21/18 19:38	12/24/18 10:36	606-20-2	
Di-n-octylphthalate	ND	ug/kg	451	94.4	1	12/21/18 19:38	12/24/18 10:36	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	451	123	1	12/21/18 19:38	12/24/18 10:36	117-81-7	
Fluoranthene	**106J**	ug/kg	451	65.7	1	12/21/18 19:38	12/24/18 10:36	206-44-0	
Fluorene	ND	ug/kg	451	93.0	1	12/21/18 19:38	12/24/18 10:36	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	451	78.0	1	12/21/18 19:38	12/24/18 10:36	87-68-3	
Hexachlorobenzene	ND	ug/kg	451	57.5	1	12/21/18 19:38	12/24/18 10:36	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	451	83.4	1	12/21/18 19:38	12/24/18 10:36	77-47-4	
Hexachloroethane	ND	ug/kg	451	119	1	12/21/18 19:38	12/24/18 10:36	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	451	93.0	1	12/21/18 19:38	12/24/18 10:36	193-39-5	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-7-SED **Lab ID: 92411773001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	451	101	1	12/21/18 19:38	12/24/18 10:36	78-59-1	
1-Methylnaphthalene	ND	ug/kg	451	118	1	12/21/18 19:38	12/24/18 10:36	90-12-0	
2-Methylnaphthalene	ND	ug/kg	451	97.1	1	12/21/18 19:38	12/24/18 10:36	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	451	137	1	12/21/18 19:38	12/24/18 10:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	451	178	1	12/21/18 19:38	12/24/18 10:36	15831-10-4	
Naphthalene	ND	ug/kg	451	111	1	12/21/18 19:38	12/24/18 10:36	91-20-3	
2-Nitroaniline	ND	ug/kg	2260	140	1	12/21/18 19:38	12/24/18 10:36	88-74-4	
3-Nitroaniline	ND	ug/kg	2260	123	1	12/21/18 19:38	12/24/18 10:36	99-09-2	
4-Nitroaniline	ND	ug/kg	903	127	1	12/21/18 19:38	12/24/18 10:36	100-01-6	
Nitrobenzene	ND	ug/kg	451	123	1	12/21/18 19:38	12/24/18 10:36	98-95-3	
2-Nitrophenol	ND	ug/kg	451	109	1	12/21/18 19:38	12/24/18 10:36	88-75-5	
4-Nitrophenol	ND	ug/kg	2260	80.7	1	12/21/18 19:38	12/24/18 10:36	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	451	146	1	12/21/18 19:38	12/24/18 10:36	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	451	86.2	1	12/21/18 19:38	12/24/18 10:36	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	451	134	1	12/21/18 19:38	12/24/18 10:36	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	451	120	1	12/21/18 19:38	12/24/18 10:36	108-60-1	
Pentachlorophenol	ND	ug/kg	2260	82.1	1	12/21/18 19:38	12/24/18 10:36	87-86-5	
Phenanthrene	ND	ug/kg	451	75.2	1	12/21/18 19:38	12/24/18 10:36	85-01-8	
Phenol	ND	ug/kg	451	135	1	12/21/18 19:38	12/24/18 10:36	108-95-2	
Pyrene	**90.0J**	ug/kg	451	76.6	1	12/21/18 19:38	12/24/18 10:36	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	451	87.6	1	12/21/18 19:38	12/24/18 10:36	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	451	140	1	12/21/18 19:38	12/24/18 10:36	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	451	99.9	1	12/21/18 19:38	12/24/18 10:36	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%	23-110		1	12/21/18 19:38	12/24/18 10:36	4165-60-0	
2-Fluorobiphenyl (S)	37	%	30-110		1	12/21/18 19:38	12/24/18 10:36	321-60-8	
Terphenyl-d14 (S)	30	%	28-110		1	12/21/18 19:38	12/24/18 10:36	1718-51-0	
Phenol-d6 (S)	49	%	22-110		1	12/21/18 19:38	12/24/18 10:36	13127-88-3	
2-Fluorophenol (S)	51	%	13-110		1	12/21/18 19:38	12/24/18 10:36	367-12-4	
2,4,6-Tribromophenol (S)	53	%	27-110		1	12/21/18 19:38	12/24/18 10:36	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	155	15.5	1	12/21/18 09:58	12/21/18 12:50	67-64-1	
Benzene	ND	ug/kg	7.8	2.5	1	12/21/18 09:58	12/21/18 12:50	71-43-2	
Bromobenzene	ND	ug/kg	7.8	3.1	1	12/21/18 09:58	12/21/18 12:50	108-86-1	
Bromochloromethane	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	74-97-5	
Bromodichloromethane	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	75-27-4	
Bromoform	ND	ug/kg	7.8	3.6	1	12/21/18 09:58	12/21/18 12:50	75-25-2	
Bromomethane	ND	ug/kg	15.5	3.9	1	12/21/18 09:58	12/21/18 12:50	74-83-9	
2-Butanone (MEK)	ND	ug/kg	155	4.5	1	12/21/18 09:58	12/21/18 12:50	78-93-3	
n-Butylbenzene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	104-51-8	
sec-Butylbenzene	ND	ug/kg	7.8	2.5	1	12/21/18 09:58	12/21/18 12:50	135-98-8	
tert-Butylbenzene	ND	ug/kg	7.8	3.1	1	12/21/18 09:58	12/21/18 12:50	98-06-6	
Carbon tetrachloride	ND	ug/kg	7.8	4.0	1	12/21/18 09:58	12/21/18 12:50	56-23-5	
Chlorobenzene	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-7-SED **Lab ID: 92411773001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	15.5	3.7	1	12/21/18 09:58	12/21/18 12:50	75-00-3	
Chloroform	ND	ug/kg	7.8	2.5	1	12/21/18 09:58	12/21/18 12:50	67-66-3	
Chloromethane	ND	ug/kg	15.5	3.7	1	12/21/18 09:58	12/21/18 12:50	74-87-3	
2-Chlorotoluene	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	95-49-8	
4-Chlorotoluene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	7.8	5.6	1	12/21/18 09:58	12/21/18 12:50	96-12-8	
Dibromochloromethane	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	106-93-4	
Dibromomethane	ND	ug/kg	7.8	3.9	1	12/21/18 09:58	12/21/18 12:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	7.8	3.1	1	12/21/18 09:58	12/21/18 12:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	15.5	5.6	1	12/21/18 09:58	12/21/18 12:50	75-71-8	
1,1-Dichloroethane	ND	ug/kg	7.8	2.3	1	12/21/18 09:58	12/21/18 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/kg	7.8	3.4	1	12/21/18 09:58	12/21/18 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	7.8	2.2	1	12/21/18 09:58	12/21/18 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	156-60-5	
1,2-Dichloropropane	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	78-87-5	
1,3-Dichloropropane	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	142-28-9	
2,2-Dichloropropane	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	594-20-7	
1,1-Dichloropropene	ND	ug/kg	7.8	2.3	1	12/21/18 09:58	12/21/18 12:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	7.8	2.3	1	12/21/18 09:58	12/21/18 12:50	10061-02-6	
Diisopropyl ether	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	108-20-3	
Ethylbenzene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	7.8	3.1	1	12/21/18 09:58	12/21/18 12:50	87-68-3	
2-Hexanone	ND	ug/kg	77.7	6.1	1	12/21/18 09:58	12/21/18 12:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	98-82-8	
p-Isopropyltoluene	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	99-87-6	
Methylene Chloride	ND	ug/kg	31.1	4.7	1	12/21/18 09:58	12/21/18 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	77.7	5.8	1	12/21/18 09:58	12/21/18 12:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	7.8	2.3	1	12/21/18 09:58	12/21/18 12:50	1634-04-4	
Naphthalene	ND	ug/kg	7.8	1.9	1	12/21/18 09:58	12/21/18 12:50	91-20-3	
n-Propylbenzene	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	103-65-1	
Styrene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	7.8	3.3	1	12/21/18 09:58	12/21/18 12:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	79-34-5	
Tetrachloroethene	ND	ug/kg	7.8	2.6	1	12/21/18 09:58	12/21/18 12:50	127-18-4	L1
Toluene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	7.8	3.4	1	12/21/18 09:58	12/21/18 12:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	7.8	2.5	1	12/21/18 09:58	12/21/18 12:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	7.8	3.3	1	12/21/18 09:58	12/21/18 12:50	79-00-5	
Trichloroethene	ND	ug/kg	7.8	3.3	1	12/21/18 09:58	12/21/18 12:50	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-7-SED **Lab ID: 92411773001** Collected: 12/19/18 14:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	7.8	3.4	1	12/21/18 09:58	12/21/18 12:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	7.8	2.5	1	12/21/18 09:58	12/21/18 12:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	7.8	3.1	1	12/21/18 09:58	12/21/18 12:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	7.8	2.8	1	12/21/18 09:58	12/21/18 12:50	108-67-8	
Vinyl acetate	ND	ug/kg	77.7	13.7	1	12/21/18 09:58	12/21/18 12:50	108-05-4	
Vinyl chloride	ND	ug/kg	15.5	2.8	1	12/21/18 09:58	12/21/18 12:50	75-01-4	
Xylene (Total)	ND	ug/kg	15.5	5.6	1	12/21/18 09:58	12/21/18 12:50	1330-20-7	
m&p-Xylene	ND	ug/kg	15.5	5.6	1	12/21/18 09:58	12/21/18 12:50	179601-23-1	
o-Xylene	ND	ug/kg	7.8	3.0	1	12/21/18 09:58	12/21/18 12:50	95-47-6	
Surrogates									
Toluene-d8 (S)	108	%	70-130		1	12/21/18 09:58	12/21/18 12:50	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1	12/21/18 09:58	12/21/18 12:50	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1	12/21/18 09:58	12/21/18 12:50	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.9**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-8-SED **Lab ID: 92411773002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	420	96.7	1	12/21/18 19:38	12/24/18 11:04	83-32-9	
Acenaphthylene	ND	ug/kg	420	99.3	1	12/21/18 19:38	12/24/18 11:04	208-96-8	
Aniline	ND	ug/kg	420	113	1	12/21/18 19:38	12/24/18 11:04	62-53-3	
Anthracene	ND	ug/kg	420	94.2	1	12/21/18 19:38	12/24/18 11:04	120-12-7	
Benzo(a)anthracene	ND	ug/kg	420	77.6	1	12/21/18 19:38	12/24/18 11:04	56-55-3	
Benzo(a)pyrene	ND	ug/kg	420	80.2	1	12/21/18 19:38	12/24/18 11:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	420	72.5	1	12/21/18 19:38	12/24/18 11:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	420	107	1	12/21/18 19:38	12/24/18 11:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	420	82.7	1	12/21/18 19:38	12/24/18 11:04	207-08-9	
Benzoic Acid	ND	ug/kg	2100	76.4	1	12/21/18 19:38	12/24/18 11:04	65-85-0	
Benzyl alcohol	ND	ug/kg	840	84.0	1	12/21/18 19:38	12/24/18 11:04	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	420	76.4	1	12/21/18 19:38	12/24/18 11:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	420	89.1	1	12/21/18 19:38	12/24/18 11:04	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	840	86.5	1	12/21/18 19:38	12/24/18 11:04	59-50-7	
4-Chloroaniline	ND	ug/kg	2100	117	1	12/21/18 19:38	12/24/18 11:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	420	98.0	1	12/21/18 19:38	12/24/18 11:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	420	107	1	12/21/18 19:38	12/24/18 11:04	111-44-4	
2-Chloronaphthalene	ND	ug/kg	420	82.7	1	12/21/18 19:38	12/24/18 11:04	91-58-7	
2-Chlorophenol	ND	ug/kg	420	115	1	12/21/18 19:38	12/24/18 11:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 11:04	7005-72-3	
Chrysene	ND	ug/kg	420	56.0	1	12/21/18 19:38	12/24/18 11:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	420	89.1	1	12/21/18 19:38	12/24/18 11:04	53-70-3	
Dibenzofuran	ND	ug/kg	420	68.7	1	12/21/18 19:38	12/24/18 11:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	420	112	1	12/21/18 19:38	12/24/18 11:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	420	95.4	1	12/21/18 19:38	12/24/18 11:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	420	118	1	12/21/18 19:38	12/24/18 11:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2100	91.6	1	12/21/18 19:38	12/24/18 11:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	420	91.6	1	12/21/18 19:38	12/24/18 11:04	120-83-2	
Diethylphthalate	ND	ug/kg	420	64.9	1	12/21/18 19:38	12/24/18 11:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	420	165	1	12/21/18 19:38	12/24/18 11:04	105-67-9	
Dimethylphthalate	ND	ug/kg	420	85.3	1	12/21/18 19:38	12/24/18 11:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	420	68.7	1	12/21/18 19:38	12/24/18 11:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	840	84.0	1	12/21/18 19:38	12/24/18 11:04	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2100	68.7	1	12/21/18 19:38	12/24/18 11:04	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	420	78.9	1	12/21/18 19:38	12/24/18 11:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	420	87.8	1	12/21/18 19:38	12/24/18 11:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	420	87.8	1	12/21/18 19:38	12/24/18 11:04	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	420	115	1	12/21/18 19:38	12/24/18 11:04	117-81-7	
Fluoranthene	ND	ug/kg	420	61.1	1	12/21/18 19:38	12/24/18 11:04	206-44-0	
Fluorene	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 11:04	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	420	72.5	1	12/21/18 19:38	12/24/18 11:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	420	53.4	1	12/21/18 19:38	12/24/18 11:04	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	420	77.6	1	12/21/18 19:38	12/24/18 11:04	77-47-4	
Hexachloroethane	ND	ug/kg	420	111	1	12/21/18 19:38	12/24/18 11:04	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 11:04	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-8-SED **Lab ID: 92411773002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	420	94.2	1	12/21/18 19:38	12/24/18 11:04	78-59-1	
1-Methylnaphthalene	ND	ug/kg	420	109	1	12/21/18 19:38	12/24/18 11:04	90-12-0	
2-Methylnaphthalene	ND	ug/kg	420	90.4	1	12/21/18 19:38	12/24/18 11:04	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	420	127	1	12/21/18 19:38	12/24/18 11:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	420	165	1	12/21/18 19:38	12/24/18 11:04	15831-10-4	
Naphthalene	ND	ug/kg	420	103	1	12/21/18 19:38	12/24/18 11:04	91-20-3	
2-Nitroaniline	ND	ug/kg	2100	130	1	12/21/18 19:38	12/24/18 11:04	88-74-4	
3-Nitroaniline	ND	ug/kg	2100	115	1	12/21/18 19:38	12/24/18 11:04	99-09-2	
4-Nitroaniline	ND	ug/kg	840	118	1	12/21/18 19:38	12/24/18 11:04	100-01-6	
Nitrobenzene	ND	ug/kg	420	115	1	12/21/18 19:38	12/24/18 11:04	98-95-3	
2-Nitrophenol	ND	ug/kg	420	102	1	12/21/18 19:38	12/24/18 11:04	88-75-5	
4-Nitrophenol	ND	ug/kg	2100	75.1	1	12/21/18 19:38	12/24/18 11:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	420	136	1	12/21/18 19:38	12/24/18 11:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	420	80.2	1	12/21/18 19:38	12/24/18 11:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	420	125	1	12/21/18 19:38	12/24/18 11:04	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	420	112	1	12/21/18 19:38	12/24/18 11:04	108-60-1	
Pentachlorophenol	ND	ug/kg	2100	76.4	1	12/21/18 19:38	12/24/18 11:04	87-86-5	
Phenanthrene	ND	ug/kg	420	70.0	1	12/21/18 19:38	12/24/18 11:04	85-01-8	
Phenol	ND	ug/kg	420	126	1	12/21/18 19:38	12/24/18 11:04	108-95-2	
Pyrene	ND	ug/kg	420	71.3	1	12/21/18 19:38	12/24/18 11:04	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	420	81.4	1	12/21/18 19:38	12/24/18 11:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	420	130	1	12/21/18 19:38	12/24/18 11:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	420	92.9	1	12/21/18 19:38	12/24/18 11:04	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%	23-110		1	12/21/18 19:38	12/24/18 11:04	4165-60-0	
2-Fluorobiphenyl (S)	60	%	30-110		1	12/21/18 19:38	12/24/18 11:04	321-60-8	
Terphenyl-d14 (S)	53	%	28-110		1	12/21/18 19:38	12/24/18 11:04	1718-51-0	
Phenol-d6 (S)	57	%	22-110		1	12/21/18 19:38	12/24/18 11:04	13127-88-3	
2-Fluorophenol (S)	55	%	13-110		1	12/21/18 19:38	12/24/18 11:04	367-12-4	
2,4,6-Tribromophenol (S)	64	%	27-110		1	12/21/18 19:38	12/24/18 11:04	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	97.6	9.8	1	12/21/18 09:58	12/21/18 13:10	67-64-1	
Benzene	ND	ug/kg	4.9	1.6	1	12/21/18 09:58	12/21/18 13:10	71-43-2	
Bromobenzene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	108-86-1	
Bromochloromethane	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	74-97-5	
Bromodichloromethane	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	75-27-4	
Bromoform	ND	ug/kg	4.9	2.2	1	12/21/18 09:58	12/21/18 13:10	75-25-2	
Bromomethane	ND	ug/kg	9.8	2.4	1	12/21/18 09:58	12/21/18 13:10	74-83-9	
2-Butanone (MEK)	ND	ug/kg	97.6	2.8	1	12/21/18 09:58	12/21/18 13:10	78-93-3	
n-Butylbenzene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.9	1.6	1	12/21/18 09:58	12/21/18 13:10	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.9	2.5	1	12/21/18 09:58	12/21/18 13:10	56-23-5	
Chlorobenzene	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-8-SED **Lab ID: 92411773002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	9.8	2.3	1	12/21/18 09:58	12/21/18 13:10	75-00-3	
Chloroform	ND	ug/kg	4.9	1.6	1	12/21/18 09:58	12/21/18 13:10	67-66-3	
Chloromethane	ND	ug/kg	9.8	2.3	1	12/21/18 09:58	12/21/18 13:10	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.9	3.5	1	12/21/18 09:58	12/21/18 13:10	96-12-8	
Dibromochloromethane	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	106-93-4	
Dibromomethane	ND	ug/kg	4.9	2.4	1	12/21/18 09:58	12/21/18 13:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.8	3.5	1	12/21/18 09:58	12/21/18 13:10	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.9	1.5	1	12/21/18 09:58	12/21/18 13:10	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.9	2.1	1	12/21/18 09:58	12/21/18 13:10	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.9	1.4	1	12/21/18 09:58	12/21/18 13:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.9	1.5	1	12/21/18 09:58	12/21/18 13:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.9	1.5	1	12/21/18 09:58	12/21/18 13:10	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	108-20-3	
Ethylbenzene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	87-68-3	
2-Hexanone	ND	ug/kg	48.8	3.8	1	12/21/18 09:58	12/21/18 13:10	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	99-87-6	
Methylene Chloride	ND	ug/kg	19.5	2.9	1	12/21/18 09:58	12/21/18 13:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	48.8	3.6	1	12/21/18 09:58	12/21/18 13:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.9	1.5	1	12/21/18 09:58	12/21/18 13:10	1634-04-4	
Naphthalene	ND	ug/kg	4.9	1.2	1	12/21/18 09:58	12/21/18 13:10	91-20-3	
n-Propylbenzene	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	103-65-1	
Styrene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	79-34-5	
Tetrachloroethene	ND	ug/kg	4.9	1.7	1	12/21/18 09:58	12/21/18 13:10	127-18-4	L1
Toluene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.9	2.1	1	12/21/18 09:58	12/21/18 13:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.9	1.6	1	12/21/18 09:58	12/21/18 13:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	79-00-5	
Trichloroethene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-8-SED **Lab ID: 92411773002** Collected: 12/19/18 14:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	4.9	2.1	1	12/21/18 09:58	12/21/18 13:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.9	1.6	1	12/21/18 09:58	12/21/18 13:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	2.0	1	12/21/18 09:58	12/21/18 13:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1.8	1	12/21/18 09:58	12/21/18 13:10	108-67-8	
Vinyl acetate	ND	ug/kg	48.8	8.6	1	12/21/18 09:58	12/21/18 13:10	108-05-4	
Vinyl chloride	ND	ug/kg	9.8	1.8	1	12/21/18 09:58	12/21/18 13:10	75-01-4	
Xylene (Total)	ND	ug/kg	9.8	3.5	1	12/21/18 09:58	12/21/18 13:10	1330-20-7	
m&p-Xylene	ND	ug/kg	9.8	3.5	1	12/21/18 09:58	12/21/18 13:10	179601-23-1	
o-Xylene	ND	ug/kg	4.9	1.9	1	12/21/18 09:58	12/21/18 13:10	95-47-6	
Surrogates									
Toluene-d8 (S)	109	%	70-130		1	12/21/18 09:58	12/21/18 13:10	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1	12/21/18 09:58	12/21/18 13:10	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1	12/21/18 09:58	12/21/18 13:10	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.4**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-9-SED **Lab ID: 92411773003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	423	97.5	1	12/21/18 19:38	12/24/18 11:32	83-32-9	
Acenaphthylene	ND	ug/kg	423	100	1	12/21/18 19:38	12/24/18 11:32	208-96-8	
Aniline	ND	ug/kg	423	114	1	12/21/18 19:38	12/24/18 11:32	62-53-3	
Anthracene	ND	ug/kg	423	94.9	1	12/21/18 19:38	12/24/18 11:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	423	78.3	1	12/21/18 19:38	12/24/18 11:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	423	80.8	1	12/21/18 19:38	12/24/18 11:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	423	73.1	1	12/21/18 19:38	12/24/18 11:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	423	108	1	12/21/18 19:38	12/24/18 11:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	423	83.4	1	12/21/18 19:38	12/24/18 11:32	207-08-9	
Benzoic Acid	ND	ug/kg	2120	77.0	1	12/21/18 19:38	12/24/18 11:32	65-85-0	
Benzyl alcohol	ND	ug/kg	847	84.7	1	12/21/18 19:38	12/24/18 11:32	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	423	77.0	1	12/21/18 19:38	12/24/18 11:32	101-55-3	
Butylbenzylphthalate	ND	ug/kg	423	89.8	1	12/21/18 19:38	12/24/18 11:32	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	847	87.2	1	12/21/18 19:38	12/24/18 11:32	59-50-7	
4-Chloroaniline	ND	ug/kg	2120	118	1	12/21/18 19:38	12/24/18 11:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	423	98.8	1	12/21/18 19:38	12/24/18 11:32	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	423	108	1	12/21/18 19:38	12/24/18 11:32	111-44-4	
2-Chloronaphthalene	ND	ug/kg	423	83.4	1	12/21/18 19:38	12/24/18 11:32	91-58-7	
2-Chlorophenol	ND	ug/kg	423	115	1	12/21/18 19:38	12/24/18 11:32	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	423	87.2	1	12/21/18 19:38	12/24/18 11:32	7005-72-3	
Chrysene	ND	ug/kg	423	56.5	1	12/21/18 19:38	12/24/18 11:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	423	89.8	1	12/21/18 19:38	12/24/18 11:32	53-70-3	
Dibenzofuran	ND	ug/kg	423	69.3	1	12/21/18 19:38	12/24/18 11:32	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	423	113	1	12/21/18 19:38	12/24/18 11:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	423	96.2	1	12/21/18 19:38	12/24/18 11:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	423	119	1	12/21/18 19:38	12/24/18 11:32	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2120	92.4	1	12/21/18 19:38	12/24/18 11:32	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	423	92.4	1	12/21/18 19:38	12/24/18 11:32	120-83-2	
Diethylphthalate	ND	ug/kg	423	65.4	1	12/21/18 19:38	12/24/18 11:32	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	423	167	1	12/21/18 19:38	12/24/18 11:32	105-67-9	
Dimethylphthalate	ND	ug/kg	423	86.0	1	12/21/18 19:38	12/24/18 11:32	131-11-3	
Di-n-butylphthalate	ND	ug/kg	423	69.3	1	12/21/18 19:38	12/24/18 11:32	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	847	84.7	1	12/21/18 19:38	12/24/18 11:32	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2120	69.3	1	12/21/18 19:38	12/24/18 11:32	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	423	79.6	1	12/21/18 19:38	12/24/18 11:32	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	423	88.5	1	12/21/18 19:38	12/24/18 11:32	606-20-2	
Di-n-octylphthalate	ND	ug/kg	423	88.5	1	12/21/18 19:38	12/24/18 11:32	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	423	115	1	12/21/18 19:38	12/24/18 11:32	117-81-7	
Fluoranthene	ND	ug/kg	423	61.6	1	12/21/18 19:38	12/24/18 11:32	206-44-0	
Fluorene	ND	ug/kg	423	87.2	1	12/21/18 19:38	12/24/18 11:32	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	423	73.1	1	12/21/18 19:38	12/24/18 11:32	87-68-3	
Hexachlorobenzene	ND	ug/kg	423	53.9	1	12/21/18 19:38	12/24/18 11:32	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	423	78.3	1	12/21/18 19:38	12/24/18 11:32	77-47-4	
Hexachloroethane	ND	ug/kg	423	112	1	12/21/18 19:38	12/24/18 11:32	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	423	87.2	1	12/21/18 19:38	12/24/18 11:32	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-9-SED **Lab ID: 92411773003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	423	94.9	1	12/21/18 19:38	12/24/18 11:32	78-59-1	
1-Methylnaphthalene	ND	ug/kg	423	110	1	12/21/18 19:38	12/24/18 11:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	423	91.1	1	12/21/18 19:38	12/24/18 11:32	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	423	128	1	12/21/18 19:38	12/24/18 11:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	423	167	1	12/21/18 19:38	12/24/18 11:32	15831-10-4	
Naphthalene	ND	ug/kg	423	104	1	12/21/18 19:38	12/24/18 11:32	91-20-3	
2-Nitroaniline	ND	ug/kg	2120	131	1	12/21/18 19:38	12/24/18 11:32	88-74-4	
3-Nitroaniline	ND	ug/kg	2120	115	1	12/21/18 19:38	12/24/18 11:32	99-09-2	
4-Nitroaniline	ND	ug/kg	847	119	1	12/21/18 19:38	12/24/18 11:32	100-01-6	
Nitrobenzene	ND	ug/kg	423	115	1	12/21/18 19:38	12/24/18 11:32	98-95-3	
2-Nitrophenol	ND	ug/kg	423	103	1	12/21/18 19:38	12/24/18 11:32	88-75-5	
4-Nitrophenol	ND	ug/kg	2120	75.7	1	12/21/18 19:38	12/24/18 11:32	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	423	137	1	12/21/18 19:38	12/24/18 11:32	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	423	80.8	1	12/21/18 19:38	12/24/18 11:32	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	423	126	1	12/21/18 19:38	12/24/18 11:32	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	423	113	1	12/21/18 19:38	12/24/18 11:32	108-60-1	
Pentachlorophenol	ND	ug/kg	2120	77.0	1	12/21/18 19:38	12/24/18 11:32	87-86-5	
Phenanthrene	ND	ug/kg	423	70.6	1	12/21/18 19:38	12/24/18 11:32	85-01-8	
Phenol	ND	ug/kg	423	127	1	12/21/18 19:38	12/24/18 11:32	108-95-2	
Pyrene	ND	ug/kg	423	71.9	1	12/21/18 19:38	12/24/18 11:32	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	423	82.1	1	12/21/18 19:38	12/24/18 11:32	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	423	131	1	12/21/18 19:38	12/24/18 11:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	423	93.7	1	12/21/18 19:38	12/24/18 11:32	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%	23-110		1	12/21/18 19:38	12/24/18 11:32	4165-60-0	
2-Fluorobiphenyl (S)	59	%	30-110		1	12/21/18 19:38	12/24/18 11:32	321-60-8	
Terphenyl-d14 (S)	55	%	28-110		1	12/21/18 19:38	12/24/18 11:32	1718-51-0	
Phenol-d6 (S)	57	%	22-110		1	12/21/18 19:38	12/24/18 11:32	13127-88-3	
2-Fluorophenol (S)	55	%	13-110		1	12/21/18 19:38	12/24/18 11:32	367-12-4	
2,4,6-Tribromophenol (S)	60	%	27-110		1	12/21/18 19:38	12/24/18 11:32	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	124	12.4	1	12/21/18 09:58	12/21/18 20:56	67-64-1	
Benzene	ND	ug/kg	6.2	2.0	1	12/21/18 09:58	12/21/18 20:56	71-43-2	
Bromobenzene	ND	ug/kg	6.2	2.5	1	12/21/18 09:58	12/21/18 20:56	108-86-1	
Bromochloromethane	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	74-97-5	
Bromodichloromethane	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	75-27-4	
Bromoform	ND	ug/kg	6.2	2.9	1	12/21/18 09:58	12/21/18 20:56	75-25-2	
Bromomethane	ND	ug/kg	12.4	3.1	1	12/21/18 09:58	12/21/18 20:56	74-83-9	
2-Butanone (MEK)	ND	ug/kg	124	3.6	1	12/21/18 09:58	12/21/18 20:56	78-93-3	
n-Butylbenzene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	104-51-8	
sec-Butylbenzene	ND	ug/kg	6.2	2.0	1	12/21/18 09:58	12/21/18 20:56	135-98-8	
tert-Butylbenzene	ND	ug/kg	6.2	2.5	1	12/21/18 09:58	12/21/18 20:56	98-06-6	
Carbon tetrachloride	ND	ug/kg	6.2	3.2	1	12/21/18 09:58	12/21/18 20:56	56-23-5	
Chlorobenzene	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-9-SED **Lab ID: 92411773003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	12.4	3.0	1	12/21/18 09:58	12/21/18 20:56	75-00-3	
Chloroform	ND	ug/kg	6.2	2.0	1	12/21/18 09:58	12/21/18 20:56	67-66-3	
Chloromethane	ND	ug/kg	12.4	3.0	1	12/21/18 09:58	12/21/18 20:56	74-87-3	
2-Chlorotoluene	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	95-49-8	
4-Chlorotoluene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.2	4.5	1	12/21/18 09:58	12/21/18 20:56	96-12-8	
Dibromochloromethane	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	106-93-4	
Dibromomethane	ND	ug/kg	6.2	3.1	1	12/21/18 09:58	12/21/18 20:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	6.2	2.5	1	12/21/18 09:58	12/21/18 20:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	12.4	4.5	1	12/21/18 09:58	12/21/18 20:56	75-71-8	
1,1-Dichloroethane	ND	ug/kg	6.2	1.9	1	12/21/18 09:58	12/21/18 20:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	6.2	2.7	1	12/21/18 09:58	12/21/18 20:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	6.2	1.7	1	12/21/18 09:58	12/21/18 20:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	156-60-5	
1,2-Dichloropropane	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	78-87-5	
1,3-Dichloropropane	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	142-28-9	
2,2-Dichloropropane	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	594-20-7	
1,1-Dichloropropene	ND	ug/kg	6.2	1.9	1	12/21/18 09:58	12/21/18 20:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	6.2	1.9	1	12/21/18 09:58	12/21/18 20:56	10061-02-6	
Diisopropyl ether	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	108-20-3	
Ethylbenzene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	6.2	2.5	1	12/21/18 09:58	12/21/18 20:56	87-68-3	
2-Hexanone	ND	ug/kg	62.1	4.8	1	12/21/18 09:58	12/21/18 20:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	99-87-6	
Methylene Chloride	ND	ug/kg	24.8	3.7	1	12/21/18 09:58	12/21/18 20:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	62.1	4.6	1	12/21/18 09:58	12/21/18 20:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	6.2	1.9	1	12/21/18 09:58	12/21/18 20:56	1634-04-4	
Naphthalene	ND	ug/kg	6.2	1.5	1	12/21/18 09:58	12/21/18 20:56	91-20-3	
n-Propylbenzene	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	103-65-1	
Styrene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.2	2.6	1	12/21/18 09:58	12/21/18 20:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	79-34-5	
Tetrachloroethene	ND	ug/kg	6.2	2.1	1	12/21/18 09:58	12/21/18 20:56	127-18-4	L1
Toluene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	6.2	2.7	1	12/21/18 09:58	12/21/18 20:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	6.2	2.0	1	12/21/18 09:58	12/21/18 20:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	6.2	2.6	1	12/21/18 09:58	12/21/18 20:56	79-00-5	
Trichloroethene	ND	ug/kg	6.2	2.6	1	12/21/18 09:58	12/21/18 20:56	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-9-SED **Lab ID: 92411773003** Collected: 12/19/18 13:25 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	6.2	2.7	1	12/21/18 09:58	12/21/18 20:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	6.2	2.0	1	12/21/18 09:58	12/21/18 20:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	2.5	1	12/21/18 09:58	12/21/18 20:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	2.2	1	12/21/18 09:58	12/21/18 20:56	108-67-8	
Vinyl acetate	ND	ug/kg	62.1	10.9	1	12/21/18 09:58	12/21/18 20:56	108-05-4	
Vinyl chloride	ND	ug/kg	12.4	2.2	1	12/21/18 09:58	12/21/18 20:56	75-01-4	
Xylene (Total)	ND	ug/kg	12.4	4.5	1	12/21/18 09:58	12/21/18 20:56	1330-20-7	
m&p-Xylene	ND	ug/kg	12.4	4.5	1	12/21/18 09:58	12/21/18 20:56	179601-23-1	
o-Xylene	ND	ug/kg	6.2	2.4	1	12/21/18 09:58	12/21/18 20:56	95-47-6	
Surrogates									
Toluene-d8 (S)	107	%	70-130		1	12/21/18 09:58	12/21/18 20:56	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1	12/21/18 09:58	12/21/18 20:56	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130		1	12/21/18 09:58	12/21/18 20:56	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.7**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-10-SED **Lab ID: 92411773004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	420	96.6	1	12/21/18 19:38	12/24/18 12:00	83-32-9	
Acenaphthylene	ND	ug/kg	420	99.2	1	12/21/18 19:38	12/24/18 12:00	208-96-8	
Aniline	ND	ug/kg	420	113	1	12/21/18 19:38	12/24/18 12:00	62-53-3	
Anthracene	ND	ug/kg	420	94.1	1	12/21/18 19:38	12/24/18 12:00	120-12-7	
Benzo(a)anthracene	ND	ug/kg	420	77.6	1	12/21/18 19:38	12/24/18 12:00	56-55-3	
Benzo(a)pyrene	ND	ug/kg	420	80.1	1	12/21/18 19:38	12/24/18 12:00	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	420	72.5	1	12/21/18 19:38	12/24/18 12:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	420	107	1	12/21/18 19:38	12/24/18 12:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	420	82.6	1	12/21/18 19:38	12/24/18 12:00	207-08-9	
Benzoic Acid	ND	ug/kg	2100	76.3	1	12/21/18 19:38	12/24/18 12:00	65-85-0	
Benzyl alcohol	ND	ug/kg	839	83.9	1	12/21/18 19:38	12/24/18 12:00	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	420	76.3	1	12/21/18 19:38	12/24/18 12:00	101-55-3	
Butylbenzylphthalate	ND	ug/kg	420	89.0	1	12/21/18 19:38	12/24/18 12:00	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	839	86.5	1	12/21/18 19:38	12/24/18 12:00	59-50-7	
4-Chloroaniline	ND	ug/kg	2100	117	1	12/21/18 19:38	12/24/18 12:00	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	420	97.9	1	12/21/18 19:38	12/24/18 12:00	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	420	107	1	12/21/18 19:38	12/24/18 12:00	111-44-4	
2-Chloronaphthalene	ND	ug/kg	420	82.6	1	12/21/18 19:38	12/24/18 12:00	91-58-7	
2-Chlorophenol	ND	ug/kg	420	114	1	12/21/18 19:38	12/24/18 12:00	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 12:00	7005-72-3	
Chrysene	ND	ug/kg	420	55.9	1	12/21/18 19:38	12/24/18 12:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	420	89.0	1	12/21/18 19:38	12/24/18 12:00	53-70-3	
Dibenzofuran	ND	ug/kg	420	68.7	1	12/21/18 19:38	12/24/18 12:00	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	420	112	1	12/21/18 19:38	12/24/18 12:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	420	95.4	1	12/21/18 19:38	12/24/18 12:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	420	118	1	12/21/18 19:38	12/24/18 12:00	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2100	91.5	1	12/21/18 19:38	12/24/18 12:00	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	420	91.5	1	12/21/18 19:38	12/24/18 12:00	120-83-2	
Diethylphthalate	ND	ug/kg	420	64.8	1	12/21/18 19:38	12/24/18 12:00	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	420	165	1	12/21/18 19:38	12/24/18 12:00	105-67-9	
Dimethylphthalate	ND	ug/kg	420	85.2	1	12/21/18 19:38	12/24/18 12:00	131-11-3	
Di-n-butylphthalate	ND	ug/kg	420	68.7	1	12/21/18 19:38	12/24/18 12:00	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	839	83.9	1	12/21/18 19:38	12/24/18 12:00	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2100	68.7	1	12/21/18 19:38	12/24/18 12:00	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	420	78.8	1	12/21/18 19:38	12/24/18 12:00	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	420	87.7	1	12/21/18 19:38	12/24/18 12:00	606-20-2	
Di-n-octylphthalate	ND	ug/kg	420	87.7	1	12/21/18 19:38	12/24/18 12:00	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	420	114	1	12/21/18 19:38	12/24/18 12:00	117-81-7	
Fluoranthene	ND	ug/kg	420	61.0	1	12/21/18 19:38	12/24/18 12:00	206-44-0	
Fluorene	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 12:00	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	420	72.5	1	12/21/18 19:38	12/24/18 12:00	87-68-3	
Hexachlorobenzene	ND	ug/kg	420	53.4	1	12/21/18 19:38	12/24/18 12:00	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	420	77.6	1	12/21/18 19:38	12/24/18 12:00	77-47-4	
Hexachloroethane	ND	ug/kg	420	111	1	12/21/18 19:38	12/24/18 12:00	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	420	86.5	1	12/21/18 19:38	12/24/18 12:00	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-10-SED **Lab ID: 92411773004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	420	94.1	1	12/21/18 19:38	12/24/18 12:00	78-59-1	
1-Methylnaphthalene	ND	ug/kg	420	109	1	12/21/18 19:38	12/24/18 12:00	90-12-0	
2-Methylnaphthalene	ND	ug/kg	420	90.3	1	12/21/18 19:38	12/24/18 12:00	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	420	127	1	12/21/18 19:38	12/24/18 12:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	420	165	1	12/21/18 19:38	12/24/18 12:00	15831-10-4	
Naphthalene	ND	ug/kg	420	103	1	12/21/18 19:38	12/24/18 12:00	91-20-3	
2-Nitroaniline	ND	ug/kg	2100	130	1	12/21/18 19:38	12/24/18 12:00	88-74-4	
3-Nitroaniline	ND	ug/kg	2100	114	1	12/21/18 19:38	12/24/18 12:00	99-09-2	
4-Nitroaniline	ND	ug/kg	839	118	1	12/21/18 19:38	12/24/18 12:00	100-01-6	
Nitrobenzene	ND	ug/kg	420	114	1	12/21/18 19:38	12/24/18 12:00	98-95-3	
2-Nitrophenol	ND	ug/kg	420	102	1	12/21/18 19:38	12/24/18 12:00	88-75-5	
4-Nitrophenol	ND	ug/kg	2100	75.0	1	12/21/18 19:38	12/24/18 12:00	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	420	136	1	12/21/18 19:38	12/24/18 12:00	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	420	80.1	1	12/21/18 19:38	12/24/18 12:00	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	420	125	1	12/21/18 19:38	12/24/18 12:00	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	420	112	1	12/21/18 19:38	12/24/18 12:00	108-60-1	
Pentachlorophenol	ND	ug/kg	2100	76.3	1	12/21/18 19:38	12/24/18 12:00	87-86-5	
Phenanthrene	ND	ug/kg	420	69.9	1	12/21/18 19:38	12/24/18 12:00	85-01-8	
Phenol	ND	ug/kg	420	126	1	12/21/18 19:38	12/24/18 12:00	108-95-2	
Pyrene	ND	ug/kg	420	71.2	1	12/21/18 19:38	12/24/18 12:00	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	420	81.4	1	12/21/18 19:38	12/24/18 12:00	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	420	130	1	12/21/18 19:38	12/24/18 12:00	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	420	92.8	1	12/21/18 19:38	12/24/18 12:00	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%	23-110		1	12/21/18 19:38	12/24/18 12:00	4165-60-0	
2-Fluorobiphenyl (S)	50	%	30-110		1	12/21/18 19:38	12/24/18 12:00	321-60-8	
Terphenyl-d14 (S)	42	%	28-110		1	12/21/18 19:38	12/24/18 12:00	1718-51-0	
Phenol-d6 (S)	55	%	22-110		1	12/21/18 19:38	12/24/18 12:00	13127-88-3	
2-Fluorophenol (S)	51	%	13-110		1	12/21/18 19:38	12/24/18 12:00	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110		1	12/21/18 19:38	12/24/18 12:00	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	88.8	8.9	1	12/21/18 09:58	12/21/18 13:48	67-64-1	
Benzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 13:48	71-43-2	
Bromobenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 13:48	108-86-1	
Bromochloromethane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	74-97-5	
Bromodichloromethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	75-27-4	
Bromoform	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 13:48	75-25-2	
Bromomethane	ND	ug/kg	8.9	2.2	1	12/21/18 09:58	12/21/18 13:48	74-83-9	
2-Butanone (MEK)	ND	ug/kg	88.8	2.6	1	12/21/18 09:58	12/21/18 13:48	78-93-3	
n-Butylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 13:48	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 13:48	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.4	2.3	1	12/21/18 09:58	12/21/18 13:48	56-23-5	
Chlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-10-SED **Lab ID: 92411773004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	8.9	2.1	1	12/21/18 09:58	12/21/18 13:48	75-00-3	
Chloroform	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 13:48	67-66-3	
Chloromethane	ND	ug/kg	8.9	2.1	1	12/21/18 09:58	12/21/18 13:48	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.4	3.2	1	12/21/18 09:58	12/21/18 13:48	96-12-8	
Dibromochloromethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	106-93-4	
Dibromomethane	ND	ug/kg	4.4	2.2	1	12/21/18 09:58	12/21/18 13:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 13:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.9	3.2	1	12/21/18 09:58	12/21/18 13:48	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 13:48	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 13:48	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.4	1.2	1	12/21/18 09:58	12/21/18 13:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 13:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 13:48	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	108-20-3	
Ethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 13:48	87-68-3	
2-Hexanone	ND	ug/kg	44.4	3.5	1	12/21/18 09:58	12/21/18 13:48	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	99-87-6	
Methylene Chloride	ND	ug/kg	17.8	2.7	1	12/21/18 09:58	12/21/18 13:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	44.4	3.3	1	12/21/18 09:58	12/21/18 13:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 13:48	1634-04-4	
Naphthalene	ND	ug/kg	4.4	1.1	1	12/21/18 09:58	12/21/18 13:48	91-20-3	
n-Propylbenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	103-65-1	
Styrene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 13:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	79-34-5	
Tetrachloroethene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 13:48	127-18-4	L1
Toluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 13:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 13:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 13:48	79-00-5	
Trichloroethene	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 13:48	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-10-SED **Lab ID: 92411773004** Collected: 12/19/18 12:50 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 13:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 13:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 13:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 13:48	108-67-8	
Vinyl acetate	ND	ug/kg	44.4	7.8	1	12/21/18 09:58	12/21/18 13:48	108-05-4	
Vinyl chloride	ND	ug/kg	8.9	1.6	1	12/21/18 09:58	12/21/18 13:48	75-01-4	
Xylene (Total)	ND	ug/kg	8.9	3.2	1	12/21/18 09:58	12/21/18 13:48	1330-20-7	
m&p-Xylene	ND	ug/kg	8.9	3.2	1	12/21/18 09:58	12/21/18 13:48	179601-23-1	
o-Xylene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 13:48	95-47-6	
Surrogates									
Toluene-d8 (S)	109	%	70-130		1	12/21/18 09:58	12/21/18 13:48	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1	12/21/18 09:58	12/21/18 13:48	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1	12/21/18 09:58	12/21/18 13:48	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.6**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-11-SED **Lab ID: 92411773005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	449	103	1	12/21/18 19:38	12/24/18 12:28	83-32-9	
Acenaphthylene	ND	ug/kg	449	106	1	12/21/18 19:38	12/24/18 12:28	208-96-8	
Aniline	ND	ug/kg	449	121	1	12/21/18 19:38	12/24/18 12:28	62-53-3	
Anthracene	ND	ug/kg	449	101	1	12/21/18 19:38	12/24/18 12:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	449	82.9	1	12/21/18 19:38	12/24/18 12:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	449	85.6	1	12/21/18 19:38	12/24/18 12:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	449	77.5	1	12/21/18 19:38	12/24/18 12:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	449	114	1	12/21/18 19:38	12/24/18 12:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	449	88.3	1	12/21/18 19:38	12/24/18 12:28	207-08-9	
Benzoic Acid	ND	ug/kg	2240	81.5	1	12/21/18 19:38	12/24/18 12:28	65-85-0	
Benzyl alcohol	ND	ug/kg	897	89.7	1	12/21/18 19:38	12/24/18 12:28	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	449	81.5	1	12/21/18 19:38	12/24/18 12:28	101-55-3	
Butylbenzylphthalate	ND	ug/kg	449	95.1	1	12/21/18 19:38	12/24/18 12:28	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	897	92.4	1	12/21/18 19:38	12/24/18 12:28	59-50-7	
4-Chloroaniline	ND	ug/kg	2240	125	1	12/21/18 19:38	12/24/18 12:28	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	449	105	1	12/21/18 19:38	12/24/18 12:28	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	449	114	1	12/21/18 19:38	12/24/18 12:28	111-44-4	
2-Chloronaphthalene	ND	ug/kg	449	88.3	1	12/21/18 19:38	12/24/18 12:28	91-58-7	
2-Chlorophenol	ND	ug/kg	449	122	1	12/21/18 19:38	12/24/18 12:28	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	449	92.4	1	12/21/18 19:38	12/24/18 12:28	7005-72-3	
Chrysene	ND	ug/kg	449	59.8	1	12/21/18 19:38	12/24/18 12:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	449	95.1	1	12/21/18 19:38	12/24/18 12:28	53-70-3	
Dibenzofuran	ND	ug/kg	449	73.4	1	12/21/18 19:38	12/24/18 12:28	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	449	120	1	12/21/18 19:38	12/24/18 12:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	449	102	1	12/21/18 19:38	12/24/18 12:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	449	126	1	12/21/18 19:38	12/24/18 12:28	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2240	97.9	1	12/21/18 19:38	12/24/18 12:28	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	449	97.9	1	12/21/18 19:38	12/24/18 12:28	120-83-2	
Diethylphthalate	ND	ug/kg	449	69.3	1	12/21/18 19:38	12/24/18 12:28	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	449	177	1	12/21/18 19:38	12/24/18 12:28	105-67-9	
Dimethylphthalate	ND	ug/kg	449	91.1	1	12/21/18 19:38	12/24/18 12:28	131-11-3	
Di-n-butylphthalate	ND	ug/kg	449	73.4	1	12/21/18 19:38	12/24/18 12:28	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	897	89.7	1	12/21/18 19:38	12/24/18 12:28	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2240	73.4	1	12/21/18 19:38	12/24/18 12:28	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	449	84.3	1	12/21/18 19:38	12/24/18 12:28	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	449	93.8	1	12/21/18 19:38	12/24/18 12:28	606-20-2	
Di-n-octylphthalate	ND	ug/kg	449	93.8	1	12/21/18 19:38	12/24/18 12:28	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	449	122	1	12/21/18 19:38	12/24/18 12:28	117-81-7	
Fluoranthene	ND	ug/kg	449	65.2	1	12/21/18 19:38	12/24/18 12:28	206-44-0	
Fluorene	ND	ug/kg	449	92.4	1	12/21/18 19:38	12/24/18 12:28	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	449	77.5	1	12/21/18 19:38	12/24/18 12:28	87-68-3	
Hexachlorobenzene	ND	ug/kg	449	57.1	1	12/21/18 19:38	12/24/18 12:28	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	449	82.9	1	12/21/18 19:38	12/24/18 12:28	77-47-4	
Hexachloroethane	ND	ug/kg	449	118	1	12/21/18 19:38	12/24/18 12:28	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	449	92.4	1	12/21/18 19:38	12/24/18 12:28	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-11-SED **Lab ID: 92411773005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	449	101	1	12/21/18 19:38	12/24/18 12:28	78-59-1	
1-Methylnaphthalene	ND	ug/kg	449	117	1	12/21/18 19:38	12/24/18 12:28	90-12-0	
2-Methylnaphthalene	ND	ug/kg	449	96.5	1	12/21/18 19:38	12/24/18 12:28	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	449	136	1	12/21/18 19:38	12/24/18 12:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	449	177	1	12/21/18 19:38	12/24/18 12:28	15831-10-4	
Naphthalene	ND	ug/kg	449	110	1	12/21/18 19:38	12/24/18 12:28	91-20-3	
2-Nitroaniline	ND	ug/kg	2240	139	1	12/21/18 19:38	12/24/18 12:28	88-74-4	
3-Nitroaniline	ND	ug/kg	2240	122	1	12/21/18 19:38	12/24/18 12:28	99-09-2	
4-Nitroaniline	ND	ug/kg	897	126	1	12/21/18 19:38	12/24/18 12:28	100-01-6	
Nitrobenzene	ND	ug/kg	449	122	1	12/21/18 19:38	12/24/18 12:28	98-95-3	
2-Nitrophenol	ND	ug/kg	449	109	1	12/21/18 19:38	12/24/18 12:28	88-75-5	
4-Nitrophenol	ND	ug/kg	2240	80.2	1	12/21/18 19:38	12/24/18 12:28	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	449	145	1	12/21/18 19:38	12/24/18 12:28	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	449	85.6	1	12/21/18 19:38	12/24/18 12:28	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	449	133	1	12/21/18 19:38	12/24/18 12:28	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	449	120	1	12/21/18 19:38	12/24/18 12:28	108-60-1	
Pentachlorophenol	ND	ug/kg	2240	81.5	1	12/21/18 19:38	12/24/18 12:28	87-86-5	
Phenanthrene	ND	ug/kg	449	74.8	1	12/21/18 19:38	12/24/18 12:28	85-01-8	
Phenol	ND	ug/kg	449	135	1	12/21/18 19:38	12/24/18 12:28	108-95-2	
Pyrene	ND	ug/kg	449	76.1	1	12/21/18 19:38	12/24/18 12:28	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	449	87.0	1	12/21/18 19:38	12/24/18 12:28	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	449	139	1	12/21/18 19:38	12/24/18 12:28	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	449	99.2	1	12/21/18 19:38	12/24/18 12:28	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	51	%	23-110		1	12/21/18 19:38	12/24/18 12:28	4165-60-0	
2-Fluorobiphenyl (S)	41	%	30-110		1	12/21/18 19:38	12/24/18 12:28	321-60-8	
Terphenyl-d14 (S)	32	%	28-110		1	12/21/18 19:38	12/24/18 12:28	1718-51-0	
Phenol-d6 (S)	47	%	22-110		1	12/21/18 19:38	12/24/18 12:28	13127-88-3	
2-Fluorophenol (S)	48	%	13-110		1	12/21/18 19:38	12/24/18 12:28	367-12-4	
2,4,6-Tribromophenol (S)	51	%	27-110		1	12/21/18 19:38	12/24/18 12:28	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	101	10.1	1	12/21/18 09:58	12/21/18 14:08	67-64-1	
Benzene	ND	ug/kg	5.0	1.6	1	12/21/18 09:58	12/21/18 14:08	71-43-2	
Bromobenzene	ND	ug/kg	5.0	2.0	1	12/21/18 09:58	12/21/18 14:08	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	75-27-4	
Bromoform	ND	ug/kg	5.0	2.3	1	12/21/18 09:58	12/21/18 14:08	75-25-2	
Bromomethane	ND	ug/kg	10.1	2.5	1	12/21/18 09:58	12/21/18 14:08	74-83-9	
2-Butanone (MEK)	ND	ug/kg	101	2.9	1	12/21/18 09:58	12/21/18 14:08	78-93-3	
n-Butylbenzene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1.6	1	12/21/18 09:58	12/21/18 14:08	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	2.0	1	12/21/18 09:58	12/21/18 14:08	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.0	2.6	1	12/21/18 09:58	12/21/18 14:08	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	108-90-7	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-11-SED **Lab ID: 92411773005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	10.1	2.4	1	12/21/18 09:58	12/21/18 14:08	75-00-3	
Chloroform	ND	ug/kg	5.0	1.6	1	12/21/18 09:58	12/21/18 14:08	67-66-3	
Chloromethane	ND	ug/kg	10.1	2.4	1	12/21/18 09:58	12/21/18 14:08	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	3.6	1	12/21/18 09:58	12/21/18 14:08	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	106-93-4	
Dibromomethane	ND	ug/kg	5.0	2.5	1	12/21/18 09:58	12/21/18 14:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	2.0	1	12/21/18 09:58	12/21/18 14:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.1	3.6	1	12/21/18 09:58	12/21/18 14:08	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.0	1.5	1	12/21/18 09:58	12/21/18 14:08	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	2.2	1	12/21/18 09:58	12/21/18 14:08	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1.4	1	12/21/18 09:58	12/21/18 14:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1.5	1	12/21/18 09:58	12/21/18 14:08	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1.5	1	12/21/18 09:58	12/21/18 14:08	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	108-20-3	
Ethylbenzene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	2.0	1	12/21/18 09:58	12/21/18 14:08	87-68-3	
2-Hexanone	ND	ug/kg	50.3	3.9	1	12/21/18 09:58	12/21/18 14:08	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	99-87-6	
Methylene Chloride	ND	ug/kg	20.1	3.0	1	12/21/18 09:58	12/21/18 14:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	50.3	3.7	1	12/21/18 09:58	12/21/18 14:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.0	1.5	1	12/21/18 09:58	12/21/18 14:08	1634-04-4	
Naphthalene	ND	ug/kg	5.0	1.2	1	12/21/18 09:58	12/21/18 14:08	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	103-65-1	
Styrene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	2.1	1	12/21/18 09:58	12/21/18 14:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1.7	1	12/21/18 09:58	12/21/18 14:08	127-18-4	L1
Toluene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	2.2	1	12/21/18 09:58	12/21/18 14:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1.6	1	12/21/18 09:58	12/21/18 14:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	2.1	1	12/21/18 09:58	12/21/18 14:08	79-00-5	
Trichloroethene	ND	ug/kg	5.0	2.1	1	12/21/18 09:58	12/21/18 14:08	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-11-SED **Lab ID: 92411773005** Collected: 12/19/18 11:45 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	5.0	2.2	1	12/21/18 09:58	12/21/18 14:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1.6	1	12/21/18 09:58	12/21/18 14:08	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	2.0	1	12/21/18 09:58	12/21/18 14:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1.8	1	12/21/18 09:58	12/21/18 14:08	108-67-8	
Vinyl acetate	ND	ug/kg	50.3	8.8	1	12/21/18 09:58	12/21/18 14:08	108-05-4	
Vinyl chloride	ND	ug/kg	10.1	1.8	1	12/21/18 09:58	12/21/18 14:08	75-01-4	
Xylene (Total)	ND	ug/kg	10.1	3.6	1	12/21/18 09:58	12/21/18 14:08	1330-20-7	
m&p-Xylene	ND	ug/kg	10.1	3.6	1	12/21/18 09:58	12/21/18 14:08	179601-23-1	
o-Xylene	ND	ug/kg	5.0	1.9	1	12/21/18 09:58	12/21/18 14:08	95-47-6	
Surrogates									
Toluene-d8 (S)	108	%	70-130		1	12/21/18 09:58	12/21/18 14:08	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1	12/21/18 09:58	12/21/18 14:08	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1	12/21/18 09:58	12/21/18 14:08	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.7**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-DUP1-SED **Lab ID: 92411773006** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	419	96.4	1	12/21/18 19:38	12/24/18 12:55	83-32-9	
Acenaphthylene	ND	ug/kg	419	99.0	1	12/21/18 19:38	12/24/18 12:55	208-96-8	
Aniline	ND	ug/kg	419	113	1	12/21/18 19:38	12/24/18 12:55	62-53-3	
Anthracene	ND	ug/kg	419	93.9	1	12/21/18 19:38	12/24/18 12:55	120-12-7	
Benzo(a)anthracene	**145J**	ug/kg	419	77.4	1	12/21/18 19:38	12/24/18 12:55	56-55-3	
Benzo(a)pyrene	**162J**	ug/kg	419	79.9	1	12/21/18 19:38	12/24/18 12:55	50-32-8	
Benzo(b)fluoranthene	**213J**	ug/kg	419	72.3	1	12/21/18 19:38	12/24/18 12:55	205-99-2	
Benzo(g,h,i)perylene	**124J**	ug/kg	419	107	1	12/21/18 19:38	12/24/18 12:55	191-24-2	
Benzo(k)fluoranthene	**92.0J**	ug/kg	419	82.5	1	12/21/18 19:38	12/24/18 12:55	207-08-9	
Benzoic Acid	ND	ug/kg	2090	76.1	1	12/21/18 19:38	12/24/18 12:55	65-85-0	
Benzyl alcohol	ND	ug/kg	838	83.8	1	12/21/18 19:38	12/24/18 12:55	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	419	76.1	1	12/21/18 19:38	12/24/18 12:55	101-55-3	
Butylbenzylphthalate	ND	ug/kg	419	88.8	1	12/21/18 19:38	12/24/18 12:55	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	838	86.3	1	12/21/18 19:38	12/24/18 12:55	59-50-7	
4-Chloroaniline	ND	ug/kg	2090	117	1	12/21/18 19:38	12/24/18 12:55	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	419	97.7	1	12/21/18 19:38	12/24/18 12:55	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	419	107	1	12/21/18 19:38	12/24/18 12:55	111-44-4	
2-Chloronaphthalene	ND	ug/kg	419	82.5	1	12/21/18 19:38	12/24/18 12:55	91-58-7	
2-Chlorophenol	ND	ug/kg	419	114	1	12/21/18 19:38	12/24/18 12:55	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	419	86.3	1	12/21/18 19:38	12/24/18 12:55	7005-72-3	
Chrysene	**141J**	ug/kg	419	55.8	1	12/21/18 19:38	12/24/18 12:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	419	88.8	1	12/21/18 19:38	12/24/18 12:55	53-70-3	
Dibenzofuran	ND	ug/kg	419	68.5	1	12/21/18 19:38	12/24/18 12:55	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	419	112	1	12/21/18 19:38	12/24/18 12:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	419	95.2	1	12/21/18 19:38	12/24/18 12:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	419	118	1	12/21/18 19:38	12/24/18 12:55	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2090	91.4	1	12/21/18 19:38	12/24/18 12:55	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	419	91.4	1	12/21/18 19:38	12/24/18 12:55	120-83-2	
Diethylphthalate	ND	ug/kg	419	64.7	1	12/21/18 19:38	12/24/18 12:55	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	419	165	1	12/21/18 19:38	12/24/18 12:55	105-67-9	
Dimethylphthalate	ND	ug/kg	419	85.0	1	12/21/18 19:38	12/24/18 12:55	131-11-3	
Di-n-butylphthalate	ND	ug/kg	419	68.5	1	12/21/18 19:38	12/24/18 12:55	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	838	83.8	1	12/21/18 19:38	12/24/18 12:55	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2090	68.5	1	12/21/18 19:38	12/24/18 12:55	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	419	78.7	1	12/21/18 19:38	12/24/18 12:55	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	419	87.6	1	12/21/18 19:38	12/24/18 12:55	606-20-2	
Di-n-octylphthalate	ND	ug/kg	419	87.6	1	12/21/18 19:38	12/24/18 12:55	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	419	114	1	12/21/18 19:38	12/24/18 12:55	117-81-7	
Fluoranthene	**230J**	ug/kg	419	60.9	1	12/21/18 19:38	12/24/18 12:55	206-44-0	
Fluorene	ND	ug/kg	419	86.3	1	12/21/18 19:38	12/24/18 12:55	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	419	72.3	1	12/21/18 19:38	12/24/18 12:55	87-68-3	
Hexachlorobenzene	ND	ug/kg	419	53.3	1	12/21/18 19:38	12/24/18 12:55	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	419	77.4	1	12/21/18 19:38	12/24/18 12:55	77-47-4	
Hexachloroethane	ND	ug/kg	419	110	1	12/21/18 19:38	12/24/18 12:55	67-72-1	
Indeno(1,2,3-cd)pyrene	**104J**	ug/kg	419	86.3	1	12/21/18 19:38	12/24/18 12:55	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-DUP1-SED **Lab ID: 92411773006** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	419	93.9	1	12/21/18 19:38	12/24/18 12:55	78-59-1	
1-Methylnaphthalene	ND	ug/kg	419	109	1	12/21/18 19:38	12/24/18 12:55	90-12-0	
2-Methylnaphthalene	ND	ug/kg	419	90.1	1	12/21/18 19:38	12/24/18 12:55	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	419	127	1	12/21/18 19:38	12/24/18 12:55	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	419	165	1	12/21/18 19:38	12/24/18 12:55	15831-10-4	
Naphthalene	ND	ug/kg	419	103	1	12/21/18 19:38	12/24/18 12:55	91-20-3	
2-Nitroaniline	ND	ug/kg	2090	129	1	12/21/18 19:38	12/24/18 12:55	88-74-4	
3-Nitroaniline	ND	ug/kg	2090	114	1	12/21/18 19:38	12/24/18 12:55	99-09-2	
4-Nitroaniline	ND	ug/kg	838	118	1	12/21/18 19:38	12/24/18 12:55	100-01-6	
Nitrobenzene	ND	ug/kg	419	114	1	12/21/18 19:38	12/24/18 12:55	98-95-3	
2-Nitrophenol	ND	ug/kg	419	102	1	12/21/18 19:38	12/24/18 12:55	88-75-5	
4-Nitrophenol	ND	ug/kg	2090	74.9	1	12/21/18 19:38	12/24/18 12:55	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	419	136	1	12/21/18 19:38	12/24/18 12:55	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	419	79.9	1	12/21/18 19:38	12/24/18 12:55	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	419	124	1	12/21/18 19:38	12/24/18 12:55	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	419	112	1	12/21/18 19:38	12/24/18 12:55	108-60-1	
Pentachlorophenol	ND	ug/kg	2090	76.1	1	12/21/18 19:38	12/24/18 12:55	87-86-5	
Phenanthrene	ND	ug/kg	419	69.8	1	12/21/18 19:38	12/24/18 12:55	85-01-8	
Phenol	ND	ug/kg	419	126	1	12/21/18 19:38	12/24/18 12:55	108-95-2	
Pyrene	**197J**	ug/kg	419	71.1	1	12/21/18 19:38	12/24/18 12:55	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	419	81.2	1	12/21/18 19:38	12/24/18 12:55	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	419	129	1	12/21/18 19:38	12/24/18 12:55	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	419	92.6	1	12/21/18 19:38	12/24/18 12:55	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	61	%	23-110		1	12/21/18 19:38	12/24/18 12:55	4165-60-0	
2-Fluorobiphenyl (S)	51	%	30-110		1	12/21/18 19:38	12/24/18 12:55	321-60-8	
Terphenyl-d14 (S)	43	%	28-110		1	12/21/18 19:38	12/24/18 12:55	1718-51-0	
Phenol-d6 (S)	59	%	22-110		1	12/21/18 19:38	12/24/18 12:55	13127-88-3	
2-Fluorophenol (S)	55	%	13-110		1	12/21/18 19:38	12/24/18 12:55	367-12-4	
2,4,6-Tribromophenol (S)	61	%	27-110		1	12/21/18 19:38	12/24/18 12:55	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	87.1	8.7	1	12/21/18 09:58	12/21/18 14:27	67-64-1	
Benzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:27	71-43-2	
Bromobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	108-86-1	
Bromochloromethane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	74-97-5	
Bromodichloromethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	75-27-4	
Bromoform	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 14:27	75-25-2	
Bromomethane	ND	ug/kg	8.7	2.2	1	12/21/18 09:58	12/21/18 14:27	74-83-9	
2-Butanone (MEK)	ND	ug/kg	87.1	2.5	1	12/21/18 09:58	12/21/18 14:27	78-93-3	
n-Butylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:27	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.4	2.3	1	12/21/18 09:58	12/21/18 14:27	56-23-5	
Chlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-DUP1-SED **Lab ID: 92411773006** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	8.7	2.1	1	12/21/18 09:58	12/21/18 14:27	75-00-3	
Chloroform	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:27	67-66-3	
Chloromethane	ND	ug/kg	8.7	2.1	1	12/21/18 09:58	12/21/18 14:27	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.4	3.1	1	12/21/18 09:58	12/21/18 14:27	96-12-8	
Dibromochloromethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	106-93-4	
Dibromomethane	ND	ug/kg	4.4	2.2	1	12/21/18 09:58	12/21/18 14:27	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.7	3.1	1	12/21/18 09:58	12/21/18 14:27	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:27	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:27	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.4	1.2	1	12/21/18 09:58	12/21/18 14:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:27	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	108-20-3	
Ethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	87-68-3	
2-Hexanone	ND	ug/kg	43.5	3.4	1	12/21/18 09:58	12/21/18 14:27	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	99-87-6	
Methylene Chloride	ND	ug/kg	17.4	2.6	1	12/21/18 09:58	12/21/18 14:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	43.5	3.2	1	12/21/18 09:58	12/21/18 14:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:27	1634-04-4	
Naphthalene	ND	ug/kg	4.4	1.0	1	12/21/18 09:58	12/21/18 14:27	91-20-3	
n-Propylbenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	103-65-1	
Styrene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	79-34-5	
Tetrachloroethene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:27	127-18-4	L1
Toluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:27	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:27	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:27	79-00-5	
Trichloroethene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:27	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-DUP1-SED **Lab ID: 92411773006** Collected: 12/19/18 09:00 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:27	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:27	108-67-8	
Vinyl acetate	ND	ug/kg	43.5	7.7	1	12/21/18 09:58	12/21/18 14:27	108-05-4	
Vinyl chloride	ND	ug/kg	8.7	1.6	1	12/21/18 09:58	12/21/18 14:27	75-01-4	
Xylene (Total)	ND	ug/kg	8.7	3.1	1	12/21/18 09:58	12/21/18 14:27	1330-20-7	
m&p-Xylene	ND	ug/kg	8.7	3.1	1	12/21/18 09:58	12/21/18 14:27	179601-23-1	
o-Xylene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:27	95-47-6	
Surrogates									
Toluene-d8 (S)	106	%	70-130		1	12/21/18 09:58	12/21/18 14:27	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1	12/21/18 09:58	12/21/18 14:27	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1	12/21/18 09:58	12/21/18 14:27	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.1**	%	0.10	0.10	1		12/21/18 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-12 MS/MSD-SED **Lab ID: 92411773007** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	411	94.7	1	12/21/18 19:38	12/26/18 13:19	83-32-9	
Acenaphthylene	**106J**	ug/kg	411	97.2	1	12/21/18 19:38	12/26/18 13:19	208-96-8	
Aniline	ND	ug/kg	411	111	1	12/21/18 19:38	12/26/18 13:19	62-53-3	
Anthracene	**167J**	ug/kg	411	92.2	1	12/21/18 19:38	12/26/18 13:19	120-12-7	
Benzo(a)anthracene	**503**	ug/kg	411	76.0	1	12/21/18 19:38	12/26/18 13:19	56-55-3	
Benzo(a)pyrene	**435**	ug/kg	411	78.5	1	12/21/18 19:38	12/26/18 13:19	50-32-8	
Benzo(b)fluoranthene	**562**	ug/kg	411	71.1	1	12/21/18 19:38	12/26/18 13:19	205-99-2	
Benzo(g,h,i)perylene	**183J**	ug/kg	411	105	1	12/21/18 19:38	12/26/18 13:19	191-24-2	
Benzo(k)fluoranthene	**236J**	ug/kg	411	81.0	1	12/21/18 19:38	12/26/18 13:19	207-08-9	
Benzoic Acid	ND	ug/kg	2060	74.8	1	12/21/18 19:38	12/26/18 13:19	65-85-0	
Benzyl alcohol	ND	ug/kg	823	82.3	1	12/21/18 19:38	12/26/18 13:19	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	411	74.8	1	12/21/18 19:38	12/26/18 13:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	411	87.3	1	12/21/18 19:38	12/26/18 13:19	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	823	84.8	1	12/21/18 19:38	12/26/18 13:19	59-50-7	
4-Chloroaniline	ND	ug/kg	2060	115	1	12/21/18 19:38	12/26/18 13:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	411	96.0	1	12/21/18 19:38	12/26/18 13:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	411	105	1	12/21/18 19:38	12/26/18 13:19	111-44-4	
2-Chloronaphthalene	ND	ug/kg	411	81.0	1	12/21/18 19:38	12/26/18 13:19	91-58-7	
2-Chlorophenol	ND	ug/kg	411	112	1	12/21/18 19:38	12/26/18 13:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	411	84.8	1	12/21/18 19:38	12/26/18 13:19	7005-72-3	
Chrysene	**490**	ug/kg	411	54.8	1	12/21/18 19:38	12/26/18 13:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	411	87.3	1	12/21/18 19:38	12/26/18 13:19	53-70-3	
Dibenzofuran	ND	ug/kg	411	67.3	1	12/21/18 19:38	12/26/18 13:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	411	110	1	12/21/18 19:38	12/26/18 13:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	411	93.5	1	12/21/18 19:38	12/26/18 13:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	411	116	1	12/21/18 19:38	12/26/18 13:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2060	89.7	1	12/21/18 19:38	12/26/18 13:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	411	89.7	1	12/21/18 19:38	12/26/18 13:19	120-83-2	
Diethylphthalate	ND	ug/kg	411	63.6	1	12/21/18 19:38	12/26/18 13:19	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	411	162	1	12/21/18 19:38	12/26/18 13:19	105-67-9	
Dimethylphthalate	ND	ug/kg	411	83.5	1	12/21/18 19:38	12/26/18 13:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	411	67.3	1	12/21/18 19:38	12/26/18 13:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	823	82.3	1	12/21/18 19:38	12/26/18 13:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2060	67.3	1	12/21/18 19:38	12/26/18 13:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	411	77.3	1	12/21/18 19:38	12/26/18 13:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	411	86.0	1	12/21/18 19:38	12/26/18 13:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	411	86.0	1	12/21/18 19:38	12/26/18 13:19	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	411	112	1	12/21/18 19:38	12/26/18 13:19	117-81-7	
Fluoranthene	**822**	ug/kg	411	59.8	1	12/21/18 19:38	12/26/18 13:19	206-44-0	
Fluorene	ND	ug/kg	411	84.8	1	12/21/18 19:38	12/26/18 13:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	411	71.1	1	12/21/18 19:38	12/26/18 13:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	411	52.4	1	12/21/18 19:38	12/26/18 13:19	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	411	76.0	1	12/21/18 19:38	12/26/18 13:19	77-47-4	
Hexachloroethane	ND	ug/kg	411	108	1	12/21/18 19:38	12/26/18 13:19	67-72-1	
Indeno(1,2,3-cd)pyrene	**186J**	ug/kg	411	84.8	1	12/21/18 19:38	12/26/18 13:19	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-12 MS/MSD-SED **Lab ID: 92411773007** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave SC	Analytical Method: EPA 8270D Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	411	92.2	1	12/21/18 19:38	12/26/18 13:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	411	107	1	12/21/18 19:38	12/26/18 13:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	411	88.5	1	12/21/18 19:38	12/26/18 13:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	411	125	1	12/21/18 19:38	12/26/18 13:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	411	162	1	12/21/18 19:38	12/26/18 13:19	15831-10-4	
Naphthalene	ND	ug/kg	411	101	1	12/21/18 19:38	12/26/18 13:19	91-20-3	
2-Nitroaniline	ND	ug/kg	2060	127	1	12/21/18 19:38	12/26/18 13:19	88-74-4	
3-Nitroaniline	ND	ug/kg	2060	112	1	12/21/18 19:38	12/26/18 13:19	99-09-2	
4-Nitroaniline	ND	ug/kg	823	116	1	12/21/18 19:38	12/26/18 13:19	100-01-6	
Nitrobenzene	ND	ug/kg	411	112	1	12/21/18 19:38	12/26/18 13:19	98-95-3	
2-Nitrophenol	ND	ug/kg	411	99.7	1	12/21/18 19:38	12/26/18 13:19	88-75-5	
4-Nitrophenol	ND	ug/kg	2060	73.5	1	12/21/18 19:38	12/26/18 13:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	411	133	1	12/21/18 19:38	12/26/18 13:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	411	78.5	1	12/21/18 19:38	12/26/18 13:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	411	122	1	12/21/18 19:38	12/26/18 13:19	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	411	110	1	12/21/18 19:38	12/26/18 13:19	108-60-1	
Pentachlorophenol	ND	ug/kg	2060	74.8	1	12/21/18 19:38	12/26/18 13:19	87-86-5	
Phenanthrene	**217J**	ug/kg	411	68.6	1	12/21/18 19:38	12/26/18 13:19	85-01-8	
Phenol	ND	ug/kg	411	123	1	12/21/18 19:38	12/26/18 13:19	108-95-2	
Pyrene	**791**	ug/kg	411	69.8	1	12/21/18 19:38	12/26/18 13:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	411	79.8	1	12/21/18 19:38	12/26/18 13:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	411	127	1	12/21/18 19:38	12/26/18 13:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	411	91.0	1	12/21/18 19:38	12/26/18 13:19	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	57	%	23-110		1	12/21/18 19:38	12/26/18 13:19	4165-60-0	
2-Fluorobiphenyl (S)	57	%	30-110		1	12/21/18 19:38	12/26/18 13:19	321-60-8	
Terphenyl-d14 (S)	53	%	28-110		1	12/21/18 19:38	12/26/18 13:19	1718-51-0	
Phenol-d6 (S)	50	%	22-110		1	12/21/18 19:38	12/26/18 13:19	13127-88-3	
2-Fluorophenol (S)	48	%	13-110		1	12/21/18 19:38	12/26/18 13:19	367-12-4	
2,4,6-Tribromophenol (S)	89	%	27-110		1	12/21/18 19:38	12/26/18 13:19	118-79-6	
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	88.1	8.8	1	12/21/18 09:58	12/21/18 14:47	67-64-1	
Benzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:47	71-43-2	
Bromobenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:47	108-86-1	
Bromochloromethane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	74-97-5	
Bromodichloromethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	75-27-4	
Bromoform	ND	ug/kg	4.4	2.0	1	12/21/18 09:58	12/21/18 14:47	75-25-2	M1
Bromomethane	ND	ug/kg	8.8	2.2	1	12/21/18 09:58	12/21/18 14:47	74-83-9	
2-Butanone (MEK)	ND	ug/kg	88.1	2.6	1	12/21/18 09:58	12/21/18 14:47	78-93-3	
n-Butylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	104-51-8	M1
sec-Butylbenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:47	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:47	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.4	2.3	1	12/21/18 09:58	12/21/18 14:47	56-23-5	
Chlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-12 MS/MSD-SED **Lab ID: 92411773007** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Chloroethane	ND	ug/kg	8.8	2.1	1	12/21/18 09:58	12/21/18 14:47	75-00-3	
Chloroform	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:47	67-66-3	
Chloromethane	ND	ug/kg	8.8	2.1	1	12/21/18 09:58	12/21/18 14:47	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.4	3.2	1	12/21/18 09:58	12/21/18 14:47	96-12-8	
Dibromochloromethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	106-93-4	
Dibromomethane	ND	ug/kg	4.4	2.2	1	12/21/18 09:58	12/21/18 14:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	106-46-7	M1
Dichlorodifluoromethane	ND	ug/kg	8.8	3.2	1	12/21/18 09:58	12/21/18 14:47	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:47	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.4	1.2	1	12/21/18 09:58	12/21/18 14:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:47	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	108-20-3	
Ethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:47	87-68-3	M1,R1
2-Hexanone	ND	ug/kg	44.1	3.4	1	12/21/18 09:58	12/21/18 14:47	591-78-6	M1
Isopropylbenzene (Cumene)	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	99-87-6	M1
Methylene Chloride	ND	ug/kg	17.6	2.6	1	12/21/18 09:58	12/21/18 14:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	44.1	3.3	1	12/21/18 09:58	12/21/18 14:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.4	1.3	1	12/21/18 09:58	12/21/18 14:47	1634-04-4	
Naphthalene	ND	ug/kg	4.4	1.1	1	12/21/18 09:58	12/21/18 14:47	91-20-3	M1
n-Propylbenzene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	103-65-1	
Styrene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	100-42-5	M1,R1
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	79-34-5	
Tetrachloroethene	ND	ug/kg	4.4	1.5	1	12/21/18 09:58	12/21/18 14:47	127-18-4	L1,M0
Toluene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	87-61-6	M1,R1
1,2,4-Trichlorobenzene	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:47	120-82-1	M1,R1
1,1,1-Trichloroethane	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	79-00-5	
Trichloroethene	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Sample: SW-12 MS/MSD-SED **Lab ID: 92411773007** Collected: 12/19/18 10:30 Received: 12/20/18 11:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A SC Volatile Org	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	ND	ug/kg	4.4	1.9	1	12/21/18 09:58	12/21/18 14:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.4	1.4	1	12/21/18 09:58	12/21/18 14:47	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.4	1.8	1	12/21/18 09:58	12/21/18 14:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.4	1.6	1	12/21/18 09:58	12/21/18 14:47	108-67-8	
Vinyl acetate	ND	ug/kg	44.1	7.8	1	12/21/18 09:58	12/21/18 14:47	108-05-4	M1
Vinyl chloride	ND	ug/kg	8.8	1.6	1	12/21/18 09:58	12/21/18 14:47	75-01-4	
Xylene (Total)	ND	ug/kg	8.8	3.2	1	12/21/18 09:58	12/21/18 14:47	1330-20-7	MS
m&p-Xylene	ND	ug/kg	8.8	3.2	1	12/21/18 09:58	12/21/18 14:47	179601-23-1	
o-Xylene	ND	ug/kg	4.4	1.7	1	12/21/18 09:58	12/21/18 14:47	95-47-6	M1
Surrogates									
Toluene-d8 (S)	106	%	70-130		1	12/21/18 09:58	12/21/18 14:47	2037-26-5	
4-Bromofluorobenzene (S)	87	%	70-130		1	12/21/18 09:58	12/21/18 14:47	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1	12/21/18 09:58	12/21/18 14:47	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.3**	%	0.10	0.10	1		12/21/18 16:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

QC Batch: 449048 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

METHOD BLANK: 2459219 Matrix: Solid
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.1	2.1	12/21/18 11:15	
1,1,1-Trichloroethane	ug/kg	ND	5.1	1.8	12/21/18 11:15	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.1	1.9	12/21/18 11:15	
1,1,2-Trichloroethane	ug/kg	ND	5.1	2.1	12/21/18 11:15	
1,1-Dichloroethane	ug/kg	ND	5.1	1.5	12/21/18 11:15	
1,1-Dichloroethene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
1,1-Dichloropropene	ug/kg	ND	5.1	1.5	12/21/18 11:15	
1,2,3-Trichlorobenzene	ug/kg	ND	5.1	2.2	12/21/18 11:15	
1,2,3-Trichloropropane	ug/kg	ND	5.1	1.6	12/21/18 11:15	
1,2,4-Trichlorobenzene	ug/kg	ND	5.1	1.6	12/21/18 11:15	
1,2,4-Trimethylbenzene	ug/kg	ND	5.1	2.0	12/21/18 11:15	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.1	3.7	12/21/18 11:15	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.1	1.8	12/21/18 11:15	
1,2-Dichlorobenzene	ug/kg	ND	5.1	1.9	12/21/18 11:15	
1,2-Dichloroethane	ug/kg	ND	5.1	2.2	12/21/18 11:15	
1,2-Dichloropropane	ug/kg	ND	5.1	1.7	12/21/18 11:15	
1,3,5-Trimethylbenzene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
1,3-Dichlorobenzene	ug/kg	ND	5.1	2.0	12/21/18 11:15	
1,3-Dichloropropane	ug/kg	ND	5.1	1.9	12/21/18 11:15	
1,4-Dichlorobenzene	ug/kg	ND	5.1	1.7	12/21/18 11:15	
2,2-Dichloropropane	ug/kg	ND	5.1	1.7	12/21/18 11:15	
2-Butanone (MEK)	ug/kg	ND	102	2.9	12/21/18 11:15	
2-Chlorotoluene	ug/kg	ND	5.1	1.7	12/21/18 11:15	
2-Hexanone	ug/kg	ND	50.8	4.0	12/21/18 11:15	
4-Chlorotoluene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.8	3.8	12/21/18 11:15	
Acetone	ug/kg	ND	102	10.2	12/21/18 11:15	
Benzene	ug/kg	ND	5.1	1.6	12/21/18 11:15	
Bromobenzene	ug/kg	ND	5.1	2.0	12/21/18 11:15	
Bromochloromethane	ug/kg	ND	5.1	1.7	12/21/18 11:15	
Bromodichloromethane	ug/kg	ND	5.1	1.9	12/21/18 11:15	
Bromoform	ug/kg	ND	5.1	2.3	12/21/18 11:15	
Bromomethane	ug/kg	ND	10.2	2.5	12/21/18 11:15	
Carbon tetrachloride	ug/kg	ND	5.1	2.6	12/21/18 11:15	
Chlorobenzene	ug/kg	ND	5.1	1.9	12/21/18 11:15	
Chloroethane	ug/kg	ND	10.2	2.4	12/21/18 11:15	
Chloroform	ug/kg	ND	5.1	1.6	12/21/18 11:15	
Chloromethane	ug/kg	ND	10.2	2.4	12/21/18 11:15	
cis-1,2-Dichloroethene	ug/kg	ND	5.1	1.4	12/21/18 11:15	
cis-1,3-Dichloropropene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
Dibromochloromethane	ug/kg	ND	5.1	1.8	12/21/18 11:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

METHOD BLANK: 2459219 Matrix: Solid
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.1	2.5	12/21/18 11:15	
Dichlorodifluoromethane	ug/kg	ND	10.2	3.7	12/21/18 11:15	
Diisopropyl ether	ug/kg	ND	5.1	1.7	12/21/18 11:15	
Ethylbenzene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
Hexachloro-1,3-butadiene	ug/kg	ND	5.1	2.0	12/21/18 11:15	
Isopropylbenzene (Cumene)	ug/kg	ND	5.1	1.9	12/21/18 11:15	
m&p-Xylene	ug/kg	ND	10.2	3.7	12/21/18 11:15	
Methyl-tert-butyl ether	ug/kg	ND	5.1	1.5	12/21/18 11:15	
Methylene Chloride	ug/kg	ND	20.3	3.0	12/21/18 11:15	
n-Butylbenzene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
n-Propylbenzene	ug/kg	ND	5.1	1.7	12/21/18 11:15	
Naphthalene	ug/kg	ND	5.1	1.2	12/21/18 11:15	
o-Xylene	ug/kg	ND	5.1	1.9	12/21/18 11:15	
p-Isopropyltoluene	ug/kg	ND	5.1	1.7	12/21/18 11:15	
sec-Butylbenzene	ug/kg	ND	5.1	1.6	12/21/18 11:15	
Styrene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
tert-Butylbenzene	ug/kg	ND	5.1	2.0	12/21/18 11:15	
Tetrachloroethene	ug/kg	ND	5.1	1.7	12/21/18 11:15	
Toluene	ug/kg	ND	5.1	1.8	12/21/18 11:15	
trans-1,2-Dichloroethene	ug/kg	ND	5.1	1.9	12/21/18 11:15	
trans-1,3-Dichloropropene	ug/kg	ND	5.1	1.5	12/21/18 11:15	
Trichloroethene	ug/kg	ND	5.1	2.1	12/21/18 11:15	
Trichlorofluoromethane	ug/kg	ND	5.1	2.2	12/21/18 11:15	
Vinyl acetate	ug/kg	ND	50.8	8.9	12/21/18 11:15	
Vinyl chloride	ug/kg	ND	10.2	1.8	12/21/18 11:15	
Xylene (Total)	ug/kg	ND	10.2	3.7	12/21/18 11:15	
1,2-Dichloroethane-d4 (S)	%	105	70-130		12/21/18 11:15	
4-Bromofluorobenzene (S)	%	90	70-130		12/21/18 11:15	
Toluene-d8 (S)	%	109	70-130		12/21/18 11:15	

LABORATORY CONTROL SAMPLE: 2459220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	53.1	48.6	92	70-130	
1,1,1-Trichloroethane	ug/kg	53.1	48.2	91	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	53.1	48.7	92	70-130	
1,1,2-Trichloroethane	ug/kg	53.1	51.8	98	70-130	
1,1-Dichloroethane	ug/kg	53.1	50.6	95	70-130	
1,1-Dichloroethene	ug/kg	53.1	55.4	104	70-130	
1,1-Dichloropropene	ug/kg	53.1	45.3	85	70-130	
1,2,3-Trichlorobenzene	ug/kg	53.1	54.6	103	70-130	
1,2,3-Trichloropropane	ug/kg	53.1	52.2	98	70-130	
1,2,4-Trichlorobenzene	ug/kg	53.1	55.2	104	70-130	
1,2,4-Trimethylbenzene	ug/kg	53.1	47.8	90	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

LABORATORY CONTROL SAMPLE: 2459220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/kg	53.1	55.0	104	70-130	
1,2-Dibromoethane (EDB)	ug/kg	53.1	49.4	93	70-130	
1,2-Dichlorobenzene	ug/kg	53.1	52.2	98	70-130	
1,2-Dichloroethane	ug/kg	53.1	49.5	93	70-130	
1,2-Dichloropropane	ug/kg	53.1	52.1	98	70-130	
1,3,5-Trimethylbenzene	ug/kg	53.1	49.4	93	70-130	
1,3-Dichlorobenzene	ug/kg	53.1	50.0	94	70-130	
1,3-Dichloropropane	ug/kg	53.1	51.2	96	70-130	
1,4-Dichlorobenzene	ug/kg	53.1	49.8	94	70-130	
2,2-Dichloropropane	ug/kg	53.1	48.4	91	70-130	
2-Butanone (MEK)	ug/kg	106	104J	98	70-130	
2-Chlorotoluene	ug/kg	53.1	50.7	95	70-130	
2-Hexanone	ug/kg	106	105	99	70-130	
4-Chlorotoluene	ug/kg	53.1	50.3	95	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	106	111	105	70-130	
Acetone	ug/kg	106	96.4J	91	70-130	
Benzene	ug/kg	53.1	49.5	93	70-130	
Bromobenzene	ug/kg	53.1	48.7	92	70-130	
Bromochloromethane	ug/kg	53.1	49.9	94	70-130	
Bromodichloromethane	ug/kg	53.1	54.0	102	70-130	
Bromoform	ug/kg	53.1	44.3	83	70-130	
Bromomethane	ug/kg	53.1	51.0	96	70-130	
Carbon tetrachloride	ug/kg	53.1	47.9	90	70-130	
Chlorobenzene	ug/kg	53.1	47.9	90	70-130	
Chloroethane	ug/kg	53.1	57.8	109	70-130	
Chloroform	ug/kg	53.1	49.1	93	70-130	
Chloromethane	ug/kg	53.1	50.9	96	70-130	
cis-1,2-Dichloroethene	ug/kg	53.1	52.7	99	70-130	
cis-1,3-Dichloropropene	ug/kg	53.1	56.7	107	70-130	
Dibromochloromethane	ug/kg	53.1	49.6	93	70-130	
Dibromomethane	ug/kg	53.1	52.7	99	70-130	
Dichlorodifluoromethane	ug/kg	53.1	46.3	87	70-130	
Diisopropyl ether	ug/kg	53.1	52.1	98	70-130	
Ethylbenzene	ug/kg	53.1	46.7	88	70-130	
Hexachloro-1,3-butadiene	ug/kg	53.1	51.2	96	70-130	
Isopropylbenzene (Cumene)	ug/kg	53.1	45.8	86	70-130	
m&p-Xylene	ug/kg	106	90.0	85	70-130	
Methyl-tert-butyl ether	ug/kg	53.1	52.2	98	70-130	
Methylene Chloride	ug/kg	53.1	51.3	97	70-130	
n-Butylbenzene	ug/kg	53.1	50.2	95	70-130	
n-Propylbenzene	ug/kg	53.1	48.6	92	70-130	
Naphthalene	ug/kg	53.1	56.6	107	70-130	
o-Xylene	ug/kg	53.1	45.8	86	70-130	
p-Isopropyltoluene	ug/kg	53.1	48.5	91	70-130	
sec-Butylbenzene	ug/kg	53.1	49.1	93	70-130	
Styrene	ug/kg	53.1	46.0	87	70-130	
tert-Butylbenzene	ug/kg	53.1	55.8	105	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

LABORATORY CONTROL SAMPLE: 2459220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	53.1	87.1	164	70-130	L1
Toluene	ug/kg	53.1	51.6	97	70-130	
trans-1,2-Dichloroethene	ug/kg	53.1	49.9	94	70-130	
trans-1,3-Dichloropropene	ug/kg	53.1	51.5	97	70-130	
Trichloroethene	ug/kg	53.1	48.9	92	70-130	
Trichlorofluoromethane	ug/kg	53.1	48.6	91	70-130	
Vinyl acetate	ug/kg	106	119	112	70-130	
Vinyl chloride	ug/kg	53.1	51.6	97	70-130	
Xylene (Total)	ug/kg	159	136	85	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Toluene-d8 (S)	%			109	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2459221 2459222

Parameter	Units	92411773007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	18.4	19.6	15.7	18.1	85	93	70-130	14	30	
1,1,1-Trichloroethane	ug/kg	ND	18.4	19.6	16.6	19.1	90	98	70-130	14	30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	18.4	19.6	16.2	16.6	88	85	70-130	2	30	
1,1,2-Trichloroethane	ug/kg	ND	18.4	19.6	17.7	19.6	96	101	70-130	10	30	
1,1-Dichloroethane	ug/kg	ND	18.4	19.6	17.2	20.6	94	106	70-130	18	30	
1,1-Dichloroethene	ug/kg	ND	18.4	19.6	18.3	21.5	99	110	70-130	16	30	
1,1-Dichloropropene	ug/kg	ND	18.4	19.6	14.4	17.1	78	87	70-130	17	30	
1,2,3-Trichlorobenzene	ug/kg	ND	18.4	19.6	9.2	13.3	50	68	70-130	36	30	M1,R1
1,2,3-Trichloropropane	ug/kg	ND	18.4	19.6	13.1	14.2	71	73	70-130	8	30	
1,2,4-Trichlorobenzene	ug/kg	ND	18.4	19.6	9.9	13.6	54	70	70-130	32	30	M1,R1
1,2,4-Trimethylbenzene	ug/kg	ND	18.4	19.6	13.0	15.2	71	78	70-130	16	30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	18.4	19.6	16.4	18.3	89	94	70-130	11	30	
1,2-Dibromoethane (EDB)	ug/kg	ND	18.4	19.6	15.7	17.7	85	90	70-130	12	30	
1,2-Dichlorobenzene	ug/kg	ND	18.4	19.6	13.4	16.8	73	86	70-130	23	30	
1,2-Dichloroethane	ug/kg	ND	18.4	19.6	16.1	18.2	88	93	70-130	12	30	
1,2-Dichloropropane	ug/kg	ND	18.4	19.6	16.8	18.9	92	97	70-130	12	30	
1,3,5-Trimethylbenzene	ug/kg	ND	18.4	19.6	13.9	16.5	76	85	70-130	17	30	
1,3-Dichlorobenzene	ug/kg	ND	18.4	19.6	13.0	16.5	71	84	70-130	24	30	
1,3-Dichloropropane	ug/kg	ND	18.4	19.6	17.1	18.9	93	97	70-130	10	30	
1,4-Dichlorobenzene	ug/kg	ND	18.4	19.6	12.7	16.1	69	82	70-130	23	30	M1
2,2-Dichloropropane	ug/kg	ND	18.4	19.6	16.4	18.5	89	95	70-130	12	30	
2-Butanone (MEK)	ug/kg	ND	36.8	39	27.7J	30.5J	75	78	70-130		30	
2-Chlorotoluene	ug/kg	ND	18.4	19.6	16.0	17.8	87	91	70-130	10	30	
2-Hexanone	ug/kg	ND	36.8	39	22.4J	24.7J	61	63	70-130		30	M1
4-Chlorotoluene	ug/kg	ND	18.4	19.6	14.5	17.1	79	88	70-130	16	30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	36.8	39	31.0J	33.7J	84	86	70-130		30	
Acetone	ug/kg	ND	36.8	39	36.0J	37.2J	98	95	70-130		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2459221 2459222

Parameter	Units	92411773007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	ND	18.4	19.6	16.4	18.8	89	97	70-130	14	30	
Bromobenzene	ug/kg	ND	18.4	19.6	16.7	18.2	91	93	70-130	9	30	
Bromochloromethane	ug/kg	ND	18.4	19.6	16.5	17.6	90	90	70-130	7	30	
Bromodichloromethane	ug/kg	ND	18.4	19.6	16.6	19.2	90	98	70-130	14	30	
Bromoform	ug/kg	ND	18.4	19.6	10.8	14.1	59	72	70-130	26	30	M1
Bromomethane	ug/kg	ND	18.4	19.6	15.6	16.4	85	84	70-130	5	30	
Carbon tetrachloride	ug/kg	ND	18.4	19.6	15.3	18.2	83	93	70-130	17	30	
Chlorobenzene	ug/kg	ND	18.4	19.6	14.5	17.4	79	89	70-130	18	30	
Chloroethane	ug/kg	ND	18.4	19.6	15.6	16.0	85	82	70-130	3	30	
Chloroform	ug/kg	ND	18.4	19.6	17.3	19.8	94	101	70-130	13	30	
Chloromethane	ug/kg	ND	18.4	19.6	16.2	17.5	88	90	70-130	8	30	
cis-1,2-Dichloroethene	ug/kg	ND	18.4	19.6	16.2	18.4	88	94	70-130	13	30	
cis-1,3-Dichloropropene	ug/kg	ND	18.4	19.6	15.5	18.2	84	93	70-130	16	30	
Dibromochloromethane	ug/kg	ND	18.4	19.6	15.2	17.8	83	91	70-130	16	30	
Dibromomethane	ug/kg	ND	18.4	19.6	15.3	17.9	83	92	70-130	16	30	
Dichlorodifluoromethane	ug/kg	ND	18.4	19.6	14.5	16.3	79	84	70-130	12	30	
Diisopropyl ether	ug/kg	ND	18.4	19.6	17.9	20.1	97	103	70-130	12	30	
Ethylbenzene	ug/kg	ND	18.4	19.6	14.6	17.3	79	89	70-130	17	30	
Hexachloro-1,3-butadiene	ug/kg	ND	18.4	19.6	9.7	13.6	53	70	70-130	34	30	M1,R1
Isopropylbenzene (Cumene)	ug/kg	ND	18.4	19.6	13.3	14.4	73	74	70-130	7	30	
m&p-Xylene	ug/kg	ND	36.8	39	27.4	31.4	75	80	70-130	13	30	
Methyl-tert-butyl ether	ug/kg	ND	18.4	19.6	16.4	18.3	89	94	70-130	11	30	
Methylene Chloride	ug/kg	ND	18.4	19.6	16.0J	15.8J	87	81	70-130		30	
n-Butylbenzene	ug/kg	ND	18.4	19.6	11.8	14.7	64	75	70-130	22	30	M1
n-Propylbenzene	ug/kg	ND	18.4	19.6	16.8	17.9	91	92	70-130	7	30	
Naphthalene	ug/kg	ND	18.4	19.6	9.9	12.9	54	66	70-130	27	30	M1
o-Xylene	ug/kg	ND	18.4	19.6	12.5	15.7	68	80	70-130	23	30	M1
p-Isopropyltoluene	ug/kg	ND	18.4	19.6	11.0	13.4	60	69	70-130	20	30	M1
sec-Butylbenzene	ug/kg	ND	18.4	19.6	13.7	16.6	74	85	70-130	20	30	
Styrene	ug/kg	ND	18.4	19.6	10.9	14.9	59	76	70-130	31	30	M1,R1
tert-Butylbenzene	ug/kg	ND	18.4	19.6	14.7	17.4	80	89	70-130	16	30	
Tetrachloroethene	ug/kg	ND	18.4	19.6	9.2	10.6	50	54	70-130	14	30	M0
Toluene	ug/kg	ND	18.4	19.6	15.8	18.8	86	96	70-130	17	30	
trans-1,2-Dichloroethene	ug/kg	ND	18.4	19.6	17.0	19.6	93	100	70-130	14	30	
trans-1,3-Dichloropropene	ug/kg	ND	18.4	19.6	14.7	18.0	80	92	70-130	20	30	
Trichloroethene	ug/kg	ND	18.4	19.6	13.6	15.9	74	81	70-130	16	30	
Trichlorofluoromethane	ug/kg	ND	18.4	19.6	17.1	19.7	93	101	70-130	14	30	
Vinyl acetate	ug/kg	ND	36.8	39	17.7J	30.0J	48	77	70-130		30	M1
Vinyl chloride	ug/kg	ND	18.4	19.6	17.5	19.1	95	98	70-130	9	30	
Xylene (Total)	ug/kg	ND	55.2	58.6	39.9	47.1	72	80	70-130	16	30	MS
1,2-Dichloroethane-d4 (S)	%						97	94	70-130			
4-Bromofluorobenzene (S)	%						93	87	70-130			
Toluene-d8 (S)	%						108	107	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

QC Batch: 449206 Analysis Method: EPA 8270D
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave SC
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

METHOD BLANK: 2460018 Matrix: Solid
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	328	63.6	12/24/18 11:43	
1,2-Dichlorobenzene	ug/kg	ND	328	87.4	12/24/18 11:43	
1,3-Dichlorobenzene	ug/kg	ND	328	74.5	12/24/18 11:43	
1,4-Dichlorobenzene	ug/kg	ND	328	92.4	12/24/18 11:43	
1-Methylnaphthalene	ug/kg	ND	328	85.4	12/24/18 11:43	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	328	87.4	12/24/18 11:43	
2,4,5-Trichlorophenol	ug/kg	ND	328	101	12/24/18 11:43	
2,4,6-Trichlorophenol	ug/kg	ND	328	72.5	12/24/18 11:43	
2,4-Dichlorophenol	ug/kg	ND	328	71.5	12/24/18 11:43	
2,4-Dimethylphenol	ug/kg	ND	328	129	12/24/18 11:43	
2,4-Dinitrophenol	ug/kg	ND	1640	53.6	12/24/18 11:43	
2,4-Dinitrotoluene	ug/kg	ND	328	61.6	12/24/18 11:43	
2,6-Dinitrotoluene	ug/kg	ND	328	68.5	12/24/18 11:43	
2-Chloronaphthalene	ug/kg	ND	328	64.6	12/24/18 11:43	
2-Chlorophenol	ug/kg	ND	328	89.4	12/24/18 11:43	
2-Methylnaphthalene	ug/kg	ND	328	70.5	12/24/18 11:43	
2-Methylphenol(o-Cresol)	ug/kg	ND	328	99.3	12/24/18 11:43	
2-Nitroaniline	ug/kg	ND	1640	101	12/24/18 11:43	
2-Nitrophenol	ug/kg	ND	328	79.5	12/24/18 11:43	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	328	129	12/24/18 11:43	
3,3'-Dichlorobenzidine	ug/kg	ND	1640	71.5	12/24/18 11:43	
3-Nitroaniline	ug/kg	ND	1640	89.4	12/24/18 11:43	
4,6-Dinitro-2-methylphenol	ug/kg	ND	656	65.6	12/24/18 11:43	
4-Bromophenylphenyl ether	ug/kg	ND	328	59.6	12/24/18 11:43	
4-Chloro-3-methylphenol	ug/kg	ND	656	67.5	12/24/18 11:43	
4-Chloroaniline	ug/kg	ND	1640	91.4	12/24/18 11:43	
4-Chlorophenylphenyl ether	ug/kg	ND	328	67.5	12/24/18 11:43	
4-Nitroaniline	ug/kg	ND	656	92.4	12/24/18 11:43	
4-Nitrophenol	ug/kg	ND	1640	58.6	12/24/18 11:43	
Acenaphthene	ug/kg	ND	328	75.5	12/24/18 11:43	
Acenaphthylene	ug/kg	ND	328	77.5	12/24/18 11:43	
Aniline	ug/kg	ND	328	88.4	12/24/18 11:43	
Anthracene	ug/kg	ND	328	73.5	12/24/18 11:43	
Benzo(a)anthracene	ug/kg	ND	328	60.6	12/24/18 11:43	
Benzo(a)pyrene	ug/kg	ND	328	62.6	12/24/18 11:43	
Benzo(b)fluoranthene	ug/kg	ND	328	56.6	12/24/18 11:43	
Benzo(g,h,i)perylene	ug/kg	ND	328	83.4	12/24/18 11:43	
Benzo(k)fluoranthene	ug/kg	ND	328	64.6	12/24/18 11:43	
Benzoic Acid	ug/kg	ND	1640	59.6	12/24/18 11:43	
Benzyl alcohol	ug/kg	ND	656	65.6	12/24/18 11:43	
bis(2-Chloroethoxy)methane	ug/kg	ND	328	76.5	12/24/18 11:43	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

METHOD BLANK: 2460018 Matrix: Solid
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethyl) ether	ug/kg	ND	328	83.4	12/24/18 11:43	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	328	89.4	12/24/18 11:43	
Butylbenzylphthalate	ug/kg	ND	328	69.5	12/24/18 11:43	
Chrysene	ug/kg	ND	328	43.7	12/24/18 11:43	
Di-n-butylphthalate	ug/kg	ND	328	53.6	12/24/18 11:43	
Di-n-octylphthalate	ug/kg	ND	328	68.5	12/24/18 11:43	
Dibenz(a,h)anthracene	ug/kg	ND	328	69.5	12/24/18 11:43	
Dibenzofuran	ug/kg	ND	328	53.6	12/24/18 11:43	
Diethylphthalate	ug/kg	ND	328	50.7	12/24/18 11:43	
Dimethylphthalate	ug/kg	ND	328	66.6	12/24/18 11:43	
Fluoranthene	ug/kg	ND	328	47.7	12/24/18 11:43	
Fluorene	ug/kg	ND	328	67.5	12/24/18 11:43	
Hexachloro-1,3-butadiene	ug/kg	ND	328	56.6	12/24/18 11:43	
Hexachlorobenzene	ug/kg	ND	328	41.7	12/24/18 11:43	
Hexachlorocyclopentadiene	ug/kg	ND	328	60.6	12/24/18 11:43	
Hexachloroethane	ug/kg	ND	328	86.4	12/24/18 11:43	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	328	67.5	12/24/18 11:43	
Isophorone	ug/kg	ND	328	73.5	12/24/18 11:43	
N-Nitroso-di-n-propylamine	ug/kg	ND	328	62.6	12/24/18 11:43	
N-Nitrosodimethylamine	ug/kg	ND	328	106	12/24/18 11:43	
N-Nitrosodiphenylamine	ug/kg	ND	328	97.4	12/24/18 11:43	
Naphthalene	ug/kg	ND	328	80.5	12/24/18 11:43	
Nitrobenzene	ug/kg	ND	328	89.4	12/24/18 11:43	
Pentachlorophenol	ug/kg	ND	1640	59.6	12/24/18 11:43	
Phenanthrene	ug/kg	ND	328	54.6	12/24/18 11:43	
Phenol	ug/kg	ND	328	98.3	12/24/18 11:43	
Pyrene	ug/kg	ND	328	55.6	12/24/18 11:43	
2,4,6-Tribromophenol (S)	%	73	27-110		12/24/18 11:43	
2-Fluorobiphenyl (S)	%	65	30-110		12/24/18 11:43	
2-Fluorophenol (S)	%	57	13-110		12/24/18 11:43	
Nitrobenzene-d5 (S)	%	61	23-110		12/24/18 11:43	
Phenol-d6 (S)	%	55	22-110		12/24/18 11:43	
Terphenyl-d14 (S)	%	71	28-110		12/24/18 11:43	

LABORATORY CONTROL SAMPLE: 2460019

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1690	1310	78	70-130	
1,2-Dichlorobenzene	ug/kg	1690	1150	68	70-130	
1,3-Dichlorobenzene	ug/kg	1690	1150	68	70-130	
1,4-Dichlorobenzene	ug/kg	1690	1220	72	70-130	
1-Methylnaphthalene	ug/kg	1690	1330	79	70-130	
2,2'-Oxybis(1-chloropropane)	ug/kg	1690	949	56	70-130	
2,4,5-Trichlorophenol	ug/kg	1690	1270	75	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

LABORATORY CONTROL SAMPLE: 2460019

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/kg	1690	1330	79	70-130	
2,4-Dichlorophenol	ug/kg	1690	1280	76	70-130	
2,4-Dimethylphenol	ug/kg	1690	1180	70	70-130	
2,4-Dinitrophenol	ug/kg	8450	6730	80	28-103	
2,4-Dinitrotoluene	ug/kg	1690	1400	83	70-130	
2,6-Dinitrotoluene	ug/kg	1690	1370	81	70-130	
2-Chloronaphthalene	ug/kg	1690	1240	73	70-130	
2-Chlorophenol	ug/kg	1690	1150	68	70-130	
2-Methylnaphthalene	ug/kg	1690	1340	79	70-130	
2-Methylphenol(o-Cresol)	ug/kg	1690	1090	64	70-130	
2-Nitroaniline	ug/kg	3380	2300	68	70-130	
2-Nitrophenol	ug/kg	1690	1320	78	70-130	
3&4-Methylphenol(m&p Cresol)	ug/kg	1690	1050	62	70-130	
3,3'-Dichlorobenzidine	ug/kg	3380	2130	63	50-150	
3-Nitroaniline	ug/kg	3380	2170	64	35-110	
4,6-Dinitro-2-methylphenol	ug/kg	3380	3030	90	70-130	
4-Bromophenylphenyl ether	ug/kg	1690	1380	82	70-130	
4-Chloro-3-methylphenol	ug/kg	3380	2550	75	70-130	
4-Chloroaniline	ug/kg	3380	2160	64	70-130	
4-Chlorophenylphenyl ether	ug/kg	1690	1390	82	70-130	
4-Nitroaniline	ug/kg	3380	2470	73	70-130	
4-Nitrophenol	ug/kg	8450	6620	78	70-130	
Acenaphthene	ug/kg	1690	1320	78	70-130	
Acenaphthylene	ug/kg	1690	1420	84	70-130	
Aniline	ug/kg	1690	976	58	29-110	
Anthracene	ug/kg	1690	1370	81	70-130	
Benzo(a)anthracene	ug/kg	1690	1370	81	70-130	
Benzo(a)pyrene	ug/kg	1690	1410	84	70-130	
Benzo(b)fluoranthene	ug/kg	1690	1370	81	70-130	
Benzo(g,h,i)perylene	ug/kg	1690	1440	85	70-130	
Benzo(k)fluoranthene	ug/kg	1690	1380	82	70-130	
Benzoic Acid	ug/kg	8450	5420	64	16-110	
Benzyl alcohol	ug/kg	3380	2190	65	70-130	
bis(2-Chloroethoxy)methane	ug/kg	1690	1190	71	70-130	
bis(2-Chloroethyl) ether	ug/kg	1690	1080	64	70-130	
bis(2-Ethylhexyl)phthalate	ug/kg	1690	1210	72	70-130	
Butylbenzylphthalate	ug/kg	1690	1210	72	70-130	
Chrysene	ug/kg	1690	1330	79	70-130	
Di-n-butylphthalate	ug/kg	1690	1290	76	70-130	
Di-n-octylphthalate	ug/kg	1690	1300	77	70-130	
Dibenz(a,h)anthracene	ug/kg	1690	1440	86	70-130	
Dibenzofuran	ug/kg	1690	1280	76	70-130	
Diethylphthalate	ug/kg	1690	1310	78	70-130	
Dimethylphthalate	ug/kg	1690	1310	78	70-130	
Fluoranthene	ug/kg	1690	1520	90	70-130	
Fluorene	ug/kg	1690	1410	83	70-130	
Hexachloro-1,3-butadiene	ug/kg	1690	1380	82	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

LABORATORY CONTROL SAMPLE: 2460019

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorobenzene	ug/kg	1690	1390	82	70-130	
Hexachlorocyclopentadiene	ug/kg	1690	1330	79	70-130	
Hexachloroethane	ug/kg	1690	1190	70	70-130	
Indeno(1,2,3-cd)pyrene	ug/kg	1690	1470	87	70-130	
Isophorone	ug/kg	1690	1100	65	70-130	
N-Nitroso-di-n-propylamine	ug/kg	1690	1090	65	70-130	
N-Nitrosodimethylamine	ug/kg	1690	1060	63	70-130	
N-Nitrosodiphenylamine	ug/kg	1690	1250	74	70-130	
Naphthalene	ug/kg	1690	1290	77	70-130	
Nitrobenzene	ug/kg	1690	1210	72	70-130	
Pentachlorophenol	ug/kg	3380	2680	79	70-130	
Phenanthrene	ug/kg	1690	1360	81	70-130	
Phenol	ug/kg	1690	1170	69	70-130	2g
Pyrene	ug/kg	1690	1310	77	70-130	
2,4,6-Tribromophenol (S)	%			87	27-110	
2-Fluorobiphenyl (S)	%			71	30-110	
2-Fluorophenol (S)	%			65	13-110	
Nitrobenzene-d5 (S)	%			68	23-110	
Phenol-d6 (S)	%			63	22-110	
Terphenyl-d14 (S)	%			68	28-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2460020 2460021

Parameter	Units	92411773007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	2110	2060	1520	1510	72	73	70-130	1	30	
1,2-Dichlorobenzene	ug/kg	ND	2110	2060	1390	1330	66	65	70-130	4	30	
1,3-Dichlorobenzene	ug/kg	ND	2110	2060	1330	1280	63	62	70-130	4	30	
1,4-Dichlorobenzene	ug/kg	ND	2110	2060	1410	1350	67	65	70-130	5	30	
1-Methylnaphthalene	ug/kg	ND	2110	2060	1600	1530	76	74	70-130	4	30	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	2110	2060	1140	1120	54	54	70-130	1	30	
2,4,5-Trichlorophenol	ug/kg	ND	2110	2060	1470	1470	69	71	70-130	0	30	
2,4,6-Trichlorophenol	ug/kg	ND	2110	2060	1640	1590	78	77	70-130	3	30	
2,4-Dichlorophenol	ug/kg	ND	2110	2060	1550	1550	73	75	70-130	0	30	
2,4-Dimethylphenol	ug/kg	ND	2110	2060	1210	1180	57	57	70-130	2	30	
2,4-Dinitrophenol	ug/kg	ND	10600	10300	1180J	982J	11	10	70-130		30	
2,4-Dinitrotoluene	ug/kg	ND	2110	2060	1150	1050	54	51	70-130	9	30	
2,6-Dinitrotoluene	ug/kg	ND	2110	2060	1330	1260	63	61	70-130	6	30	
2-Chloronaphthalene	ug/kg	ND	2110	2060	1460	1410	69	69	70-130	3	30	
2-Chlorophenol	ug/kg	ND	2110	2060	1360	1340	65	65	70-130	2	30	
2-Methylnaphthalene	ug/kg	ND	2110	2060	1650	1560	78	76	70-130	5	30	
2-Methylphenol(o-Cresol)	ug/kg	ND	2110	2060	1220	1190	58	58	70-130	2	30	
2-Nitroaniline	ug/kg	ND	4230	4130	2460	2480	58	60	70-130	1	30	
2-Nitrophenol	ug/kg	ND	2110	2060	1380	1290	65	62	70-130	7	30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2460020 2460021

Parameter	Units	92411773007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	2110	2060	1170	1160	56	56	70-130	1	30	
3,3'-Dichlorobenzidine	ug/kg	ND	4230	4130	1840J	1920J	44	47	70-130		30	
3-Nitroaniline	ug/kg	ND	4230	4130	2320	2300	55	56	70-130	1	30	
4,6-Dinitro-2-methylphenol	ug/kg	ND	4230	4130	493J	335J	12	8	70-130		30	
4-Bromophenylphenyl ether	ug/kg	ND	2110	2060	1750	1700	83	82	70-130	3	30	
4-Chloro-3-methylphenol	ug/kg	ND	4230	4130	2840	2850	67	69	70-130	0	30	
4-Chloroaniline	ug/kg	ND	4230	4130	2020J	2050	48	50	70-130		30	
4-Chlorophenylphenyl ether	ug/kg	ND	2110	2060	1470	1430	70	69	70-130	3	30	
4-Nitroaniline	ug/kg	ND	4230	4130	2180	2260	52	55	70-130	3	30	
4-Nitrophenol	ug/kg	ND	10600	10300	5910	5780	56	56	70-130	2	30	
Acenaphthene	ug/kg	ND	2110	2060	1550	1470	74	71	70-130	6	30	
Acenaphthylene	ug/kg	106J	2110	2060	1950	1540	87	70	70-130	24	30	
Aniline	ug/kg	ND	2110	2060	752	759	36	37	70-130	1	30	
Anthracene	ug/kg	167J	2110	2060	2120	1530	93	66	70-130	32	30	
Benzo(a)anthracene	ug/kg	503	2110	2060	3570	1760	145	61	70-130	68	30	
Benzo(a)pyrene	ug/kg	435	2110	2060	3370	1680	139	60	70-130	67	30	
Benzo(b)fluoranthene	ug/kg	562	2110	2060	3950	1960	161	68	70-130	67	30	
Benzo(g,h,i)perylene	ug/kg	183J	2110	2060	1710	1080	72	43	70-130	45	30	
Benzo(k)fluoranthene	ug/kg	236J	2110	2060	2710	1680	117	70	70-130	47	30	
Benzoic Acid	ug/kg	ND	10600	10300	839J	708J	8	7	70-130		30	
Benzyl alcohol	ug/kg	ND	4230	4130	2480	2450	59	59	70-130	1	30	
bis(2-Chloroethoxy)methane	ug/kg	ND	2110	2060	1340	1330	63	64	70-130	1	30	
bis(2-Chloroethyl) ether	ug/kg	ND	2110	2060	1290	1270	61	61	70-130	2	30	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2110	2060	1500	1460	71	71	70-130	2	30	
Butylbenzylphthalate	ug/kg	ND	2110	2060	1370	1440	65	70	70-130	5	30	
Chrysene	ug/kg	490	2110	2060	3350	1740	135	61	70-130	63	30	
Di-n-butylphthalate	ug/kg	ND	2110	2060	1370	1320	65	64	70-130	3	30	
Di-n-octylphthalate	ug/kg	ND	2110	2060	1520	1520	72	74	70-130	0	30	
Dibenz(a,h)anthracene	ug/kg	ND	2110	2060	1360	1190	64	58	70-130	13	30	
Dibenzofuran	ug/kg	ND	2110	2060	1520	1370	72	66	70-130	10	30	
Diethylphthalate	ug/kg	ND	2110	2060	1410	1400	67	68	70-130	0	30	
Dimethylphthalate	ug/kg	ND	2110	2060	1460	1440	69	70	70-130	1	30	
Fluoranthene	ug/kg	822	2110	2060	4970	1650	196	40	70-130	100	30	
Fluorene	ug/kg	ND	2110	2060	1630	1450	77	70	70-130	12	30	
Hexachloro-1,3-butadiene	ug/kg	ND	2110	2060	1670	1580	79	77	70-130	5	30	
Hexachlorobenzene	ug/kg	ND	2110	2060	1700	1700	80	82	70-130	0	30	
Hexachlorocyclopentadiene	ug/kg	ND	2110	2060	90.8J	77.9J	4	4	70-130		30	
Hexachloroethane	ug/kg	ND	2110	2060	1050	923	50	45	70-130	13	30	
Indeno(1,2,3-cd)pyrene	ug/kg	186J	2110	2060	1800	1190	76	48	70-130	41	30	
Isophorone	ug/kg	ND	2110	2060	1260	1220	60	59	70-130	3	30	
N-Nitroso-di-n-propylamine	ug/kg	ND	2110	2060	1280	1250	61	61	70-130	3	30	
N-Nitrosodimethylamine	ug/kg	ND	2110	2060	966	953	46	46	70-130	1	30	
N-Nitrosodiphenylamine	ug/kg	ND	2110	2060	1640	1590	78	77	70-130	3	30	
Naphthalene	ug/kg	ND	2110	2060	1660	1520	77	71	70-130	9	30	
Nitrobenzene	ug/kg	ND	2110	2060	1390	1330	66	64	70-130	5	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2460020 2460021

Parameter	Units	92411773007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Pentachlorophenol	ug/kg	ND	4230	4130	2800	2800	66	68	70-130	0	30	
Phenanthrene	ug/kg	217J	2110	2060	2810	1660	123	70	70-130	51	30	
Phenol	ug/kg	ND	2110	2060	1280	1250	61	61	70-130	2	30	1g
Pyrene	ug/kg	791	2110	2060	5000	2000	199	58	70-130	86	30	
2,4,6-Tribromophenol (S)	%						86	89	27-110			
2-Fluorobiphenyl (S)	%						62	63	30-110			
2-Fluorophenol (S)	%						54	53	13-110			
Nitrobenzene-d5 (S)	%						61	61	23-110			
Phenol-d6 (S)	%						57	56	22-110			
Terphenyl-d14 (S)	%						56	64	28-110			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

QC Batch: 449178 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92411773001, 92411773002, 92411773003, 92411773004, 92411773005, 92411773006, 92411773007

SAMPLE DUPLICATE: 2459840

Parameter	Units	92407366141 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.0	19.0	0	25	H1

SAMPLE DUPLICATE: 2459841

Parameter	Units	92411866002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.5	5.5	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

1g	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
2g	Footnote applies to all recoveries exceeding QC limits. Recovery did not meet 70-130% South Carolina required limits. Recovery meets method required in-house generated control limits. Footnote applies to all recoveries less than 70%.
H1	Analysis conducted outside the EPA method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Former Bramlette MGP J18120519
Pace Project No.: 92411773

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92411773001	**SW-7-SED**	EPA 3546	449206	EPA 8270D	449373
92411773002	**SW-8-SED**	EPA 3546	449206	EPA 8270D	449373
92411773003	**SW-9-SED**	EPA 3546	449206	EPA 8270D	449373
92411773004	**SW-10-SED**	EPA 3546	449206	EPA 8270D	449373
92411773005	**SW-11-SED**	EPA 3546	449206	EPA 8270D	449373
92411773006	**SW-DUP1-SED**	EPA 3546	449206	EPA 8270D	449373
92411773007	**SW-12 MS/MSD-SED**	EPA 3546	449206	EPA 8270D	449373
92411773001	**SW-7-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773002	**SW-8-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773003	**SW-9-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773004	**SW-10-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773005	**SW-11-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773006	**SW-DUP1-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773007	**SW-12 MS/MSD-SED**	EPA 5035A	449048	EPA 8260B	449080
92411773001	**SW-7-SED**	ASTM D2974-87	449178		
92411773002	**SW-8-SED**	ASTM D2974-87	449178		
92411773003	**SW-9-SED**	ASTM D2974-87	449178		
92411773004	**SW-10-SED**	ASTM D2974-87	449178		
92411773005	**SW-11-SED**	ASTM D2974-87	449178		
92411773006	**SW-DUP1-SED**	ASTM D2974-87	449178		
92411773007	**SW-12 MS/MSD-SED**	ASTM D2974-87	449178		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville [X] Eden [ ] Greenwood [ ] Huntersville [ ] Raleigh [ ] Mechanicsville [ ]

WO#: 92411773
92411773

Sample Condition Upon Receipt

Client Name: Synterra

Project #

Courier: [ ] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [X] Pace [ ] Other:____

Custody Seal Present? [ ] Yes [X] No Seals Intact? [ ] Yes [X] No

Date/Initials Person Examining Contents: 12/20 AR

Packing Material: [ ] Bubble Wrap [X] Bubble Bags [ ] None [ ] Other

Biological Tissue Frozen? [ ] Yes [ ] No [X] N/A

Thermometer: [X] IR Gun ID: 93-T046 Type of Ice: [X] Wet [ ] Blue [ ] None

Cooler Temp (°C): 5.4/4.8/5.5 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 5.4/4.8/5.5

Temp should be above freezing to 6°C
[ ] Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ([ ] N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? [X] Yes [ ] No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [X] No

				Comments/Discrepancy:
Chain of Custody Present?	[X] Yes	[ ] No	[ ] N/A	1.
Samples Arrived within Hold Time?	[X] Yes	[ ] No	[ ] N/A	2.
Short Hold Time Analysis (<72 hr.)?	[ ] Yes	[X] No	[ ] N/A	3.
Rush Turn Around Time Requested?	[ ] Yes	[X] No	[ ] N/A	4.
Sufficient Volume?	[X] Yes	[ ] No	[ ] N/A	5.
Correct Containers Used?	[X] Yes	[ ] No	[ ] N/A	6.
-Pace Containers Used?	[X] Yes	[ ] No	[ ] N/A	
Containers Intact?	[X] Yes	[ ] No	[ ] N/A	7.
Dissolved analysis: Samples Field Filtered?	[ ] Yes	[ ] No	[X] N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	[ ] Yes	[X] No	[ ] N/A	9. Two extra samples.
Headspace in VOA Vials (>5-6mm)?	[ ] Yes	[ ] No	[X] N/A	10. Soils
Trip Blank Present?	[ ] Yes	[X] No	[ ] N/A	11.
Trip Blank Custody Seals Present?	[ ] Yes	[X] No	[ ] N/A	

Field Data Required? [ ] Yes [ ] No

COMMENTS/SAMPLE DISCREPANCY

Client has two extra sample sets that are not on the CoC. These samples are SW-DUP 1 and SW-12 MS/MSD. Please read the bottle sheet.

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO#: 92411773

PM: KLH1 Due Date: 12/28/18

CLIENT: 92-Duke Ener

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1	\				\	\	\	\	/		\		\	\	\					/				\	\			
2	\				\	\	\	\	/		\		\	\	\					/				\	\			
3	\				\	\	\	\	/		\		\	\	\					/				\	\			
4	\				\	\	\	\	/		\		\	\	\					/				\	\			
5	\				\	\	\	\	/		\		\	\	\					/				\	\			
6	\				\	\	\	\	/		\		\	\	\					/				\	\			
7	\				\	\	\	\	/		\		\	\	\					/				\	\			
8	\				\	\	\	\	/		\		\	\	\					/				\	\			
9	\				\	\	\				\		\	\	\									\	\			
10	\				\	\	\				\		\	\	\									\	\			
11	\				\	\	\				\		\	\	\									\	\			
12	\				\	\	\				\		\	\	\									\	\			

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Synterra	Report To:	Heather Smith	Attention:	
Address:	148 River street	Copy To:		Company Name:	
Suite 220, Greenville, SC 29601				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Bramlette MGP Site	Pace Project Manager:	kevin.herring@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	7754

Regulatory Agency

State / Location: SC

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260	8270 SVOC	Trip BLANK	Residual Chlorine (Y/N)	
1	SW-7-SED	SL	G			12-19-18	1430	10	2	1							1		1	1			001
2	SW-8-SED	"	"			"	1400	11	2	1							1		1	1			002
3	SW-9-SED	"	"			"	1325	9	"	"							"		"	"			003
4	SW-10-SED	"	"			"	1250	10	"	"							"		"	"			004
5	SW-11-SED	"	"			"	1145	9	"	"							"		"	"			005
6	SW-12-SED MS/MSD	"	"			"	1030	8	"	"							"		"	"			006-MS/MSD
7	SW-DUP 1-SED																						006-DUP
8																							
9																							
10																							
11																							
12																							

9241773

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		12/20/18	1115		12-20-18	1115	
		12-20-18	1505		12-20-18	1515	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Spiking

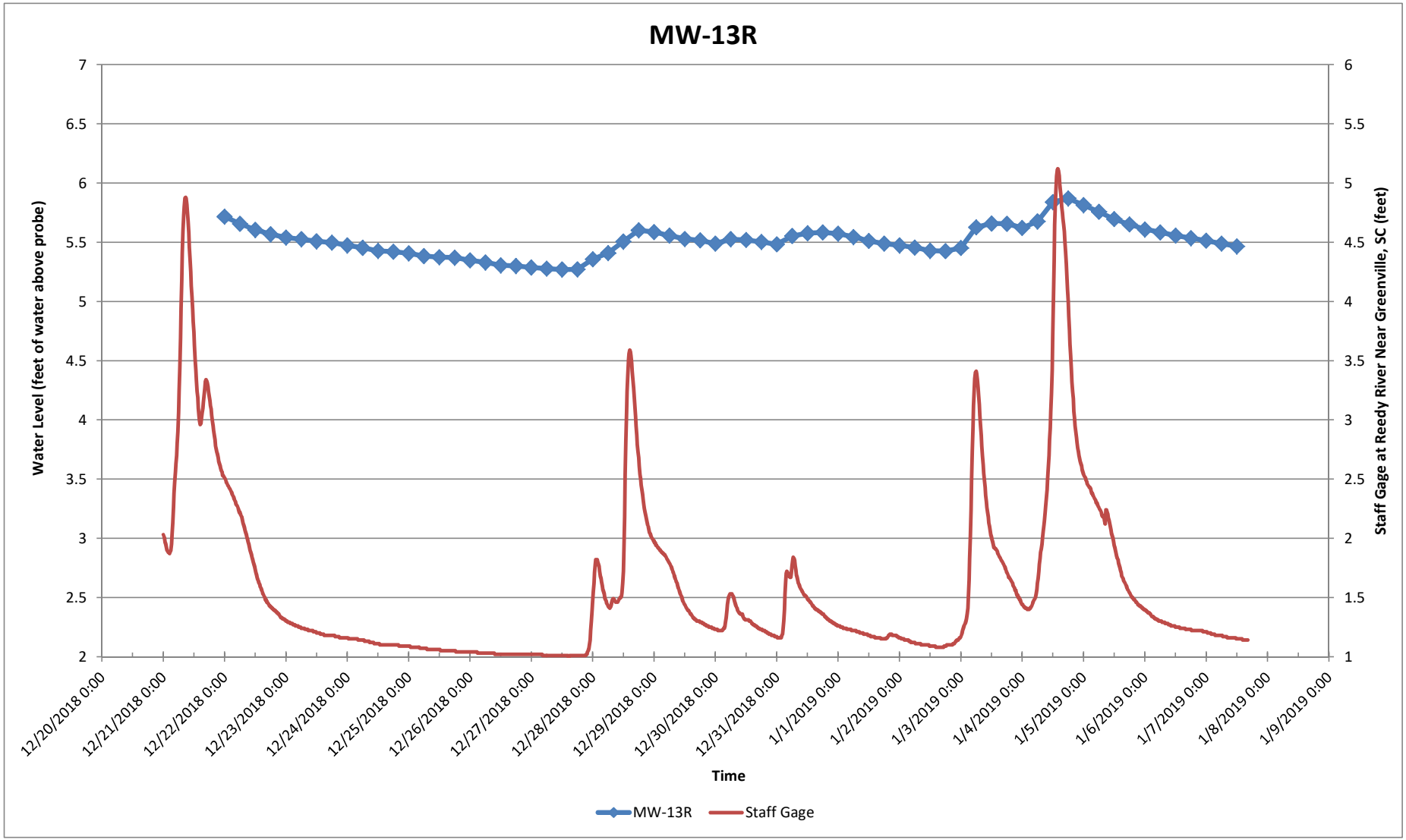
SIGNATURE of SAMPLER: [signature]

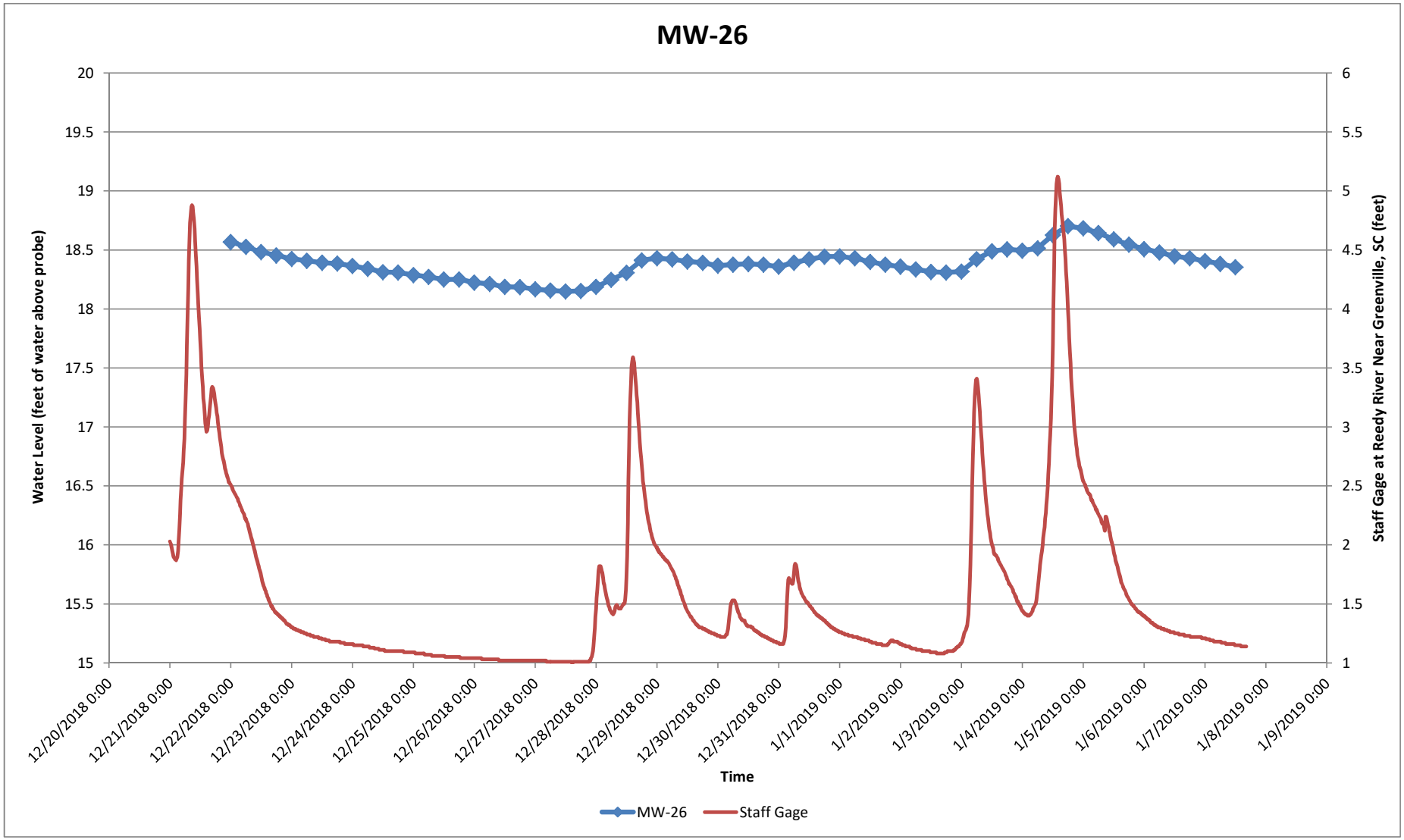
DATE Signed: 12-19-18

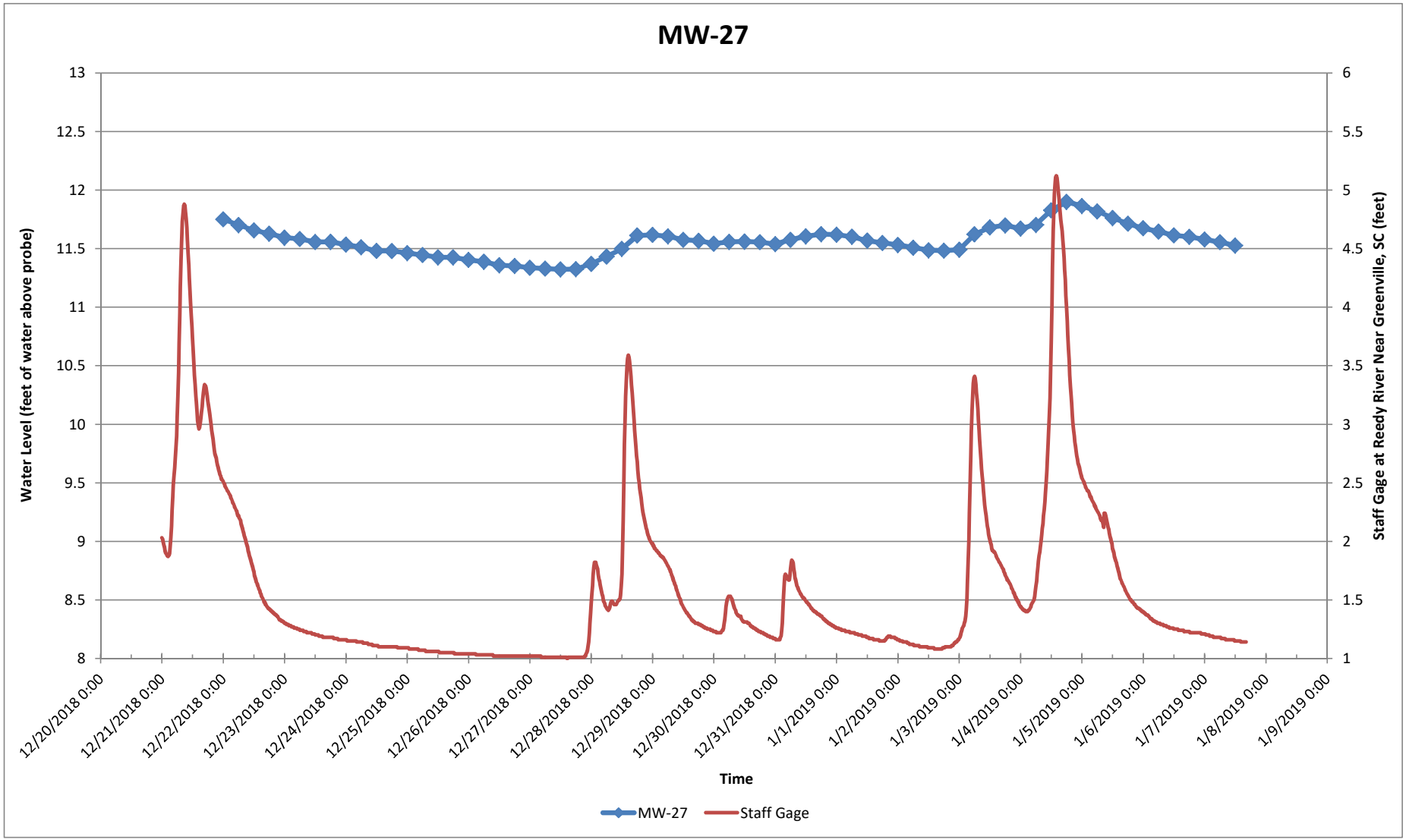
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
5.4 / 5.5			

ATTACHMENT G

Hydrographs


MW-13R
Water Level (feet of water above probe)
Staff Gage at Reedy River Near Greenville, SC (feet)
7
6.5
6
5.5
5
4.5
4
3.5
3
2.5
2
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
12/20/2018 0:00
12/21/2018 0:00
12/22/2018 0:00
12/23/2018 0:00
12/24/2018 0:00
12/25/2018 0:00
12/26/2018 0:00
12/27/2018 0:00
12/28/2018 0:00
12/29/2018 0:00
12/30/2018 0:00
12/31/2018 0:00
1/1/2019 0:00
1/2/2019 0:00
1/3/2019 0:00
1/4/2019 0:00
1/5/2019 0:00
1/6/2019 0:00
1/7/2019 0:00
1/8/2019 0:00
1/9/2019 0:00
Time
MW-13R
Staff Gage


MW-26
Water Level (feet of water above probe)
Staff Gage at Reedy River Near Greenville, SC (feet)
20
19.5
19
18.5
18
17.5
17
16.5
16
15.5
15
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
12/20/2018 0:00
12/21/2018 0:00
12/22/2018 0:00
12/23/2018 0:00
12/24/2018 0:00
12/25/2018 0:00
12/26/2018 0:00
12/27/2018 0:00
12/28/2018 0:00
12/29/2018 0:00
12/30/2018 0:00
12/31/2018 0:00
1/1/2019 0:00
1/2/2019 0:00
1/3/2019 0:00
1/4/2019 0:00
1/5/2019 0:00
1/6/2019 0:00
1/7/2019 0:00
1/8/2019 0:00
1/9/2019 0:00
Time
MW-26
Staff Gage


MW-27
Water Level (feet of water above probe)
Staff Gage at Reedy River Near Greenville, SC (feet)
13
12.5
12
11.5
11
10.5
10
9.5
9
8.5
8
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
12/20/2018 0:00
12/21/2018 0:00
12/22/2018 0:00
12/23/2018 0:00
12/24/2018 0:00
12/25/2018 0:00
12/26/2018 0:00
12/27/2018 0:00
12/28/2018 0:00
12/29/2018 0:00
12/30/2018 0:00
12/31/2018 0:00
1/1/2019 0:00
1/2/2019 0:00
1/3/2019 0:00
1/4/2019 0:00
1/5/2019 0:00
1/6/2019 0:00
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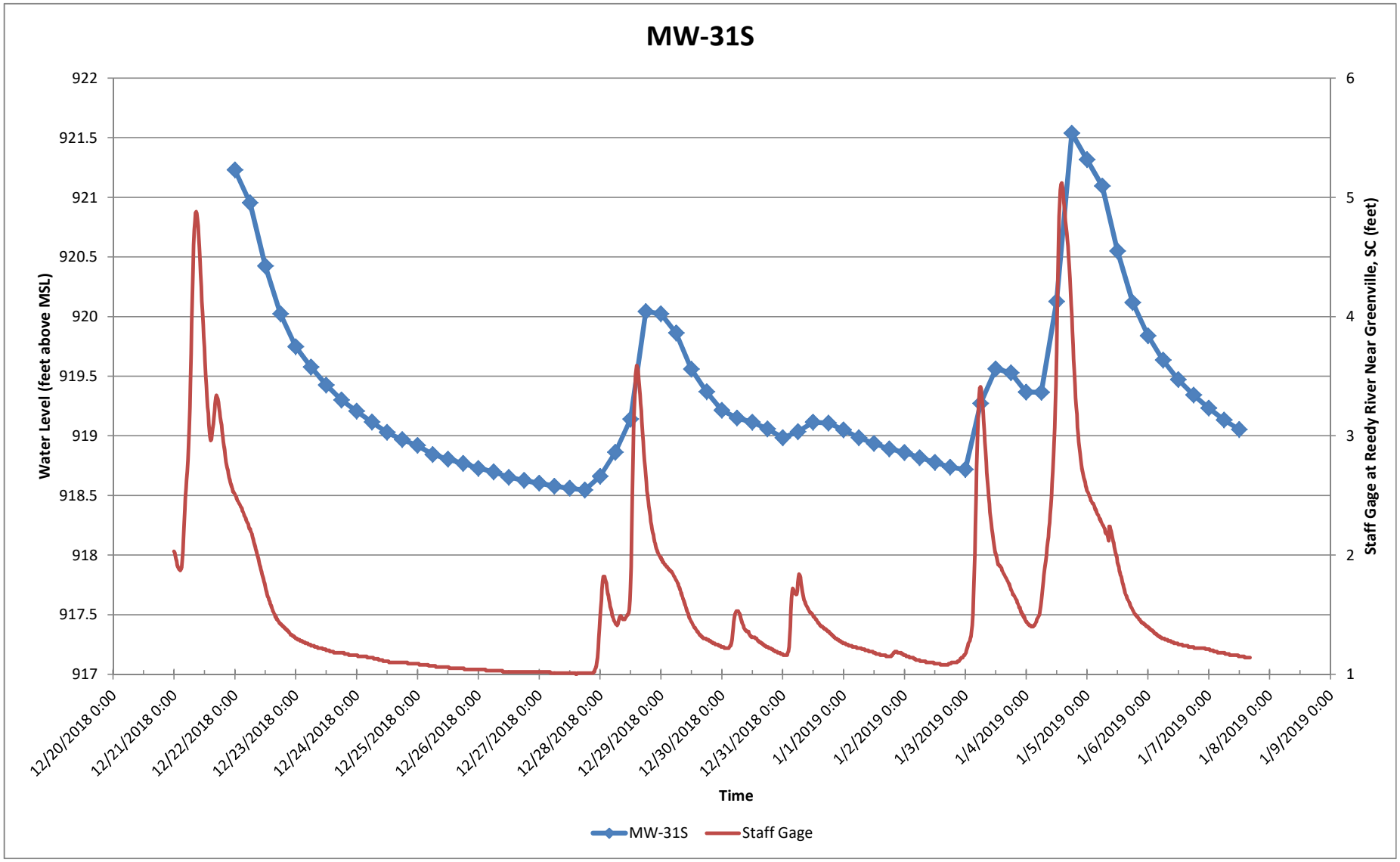
1/8/2019 0:00
1/9/2019 0:00
Time
MW-27
Staff Gage


MW-31S
Water Level (feet above MSL)
Staff Gage at Reedy River Near Greenville, SC (feet)
922
921.5
921
920.5
920
919.5
919
918.5
918
917.5
917
6
5
4
3
2
1
12/20/2018 0:00
12/21/2018 0:00
12/22/2018 0:00
12/23/2018 0:00
12/24/2018 0:00
12/25/2018 0:00
12/26/2018 0:00
12/27/2018 0:00
12/28/2018 0:00
12/29/2018 0:00
12/30/2018 0:00
12/31/2018 0:00
1/1/2019 0:00
1/2/2019 0:00
1/3/2019 0:00
1/4/2019 0:00
1/5/2019 0:00
1/6/2019 0:00
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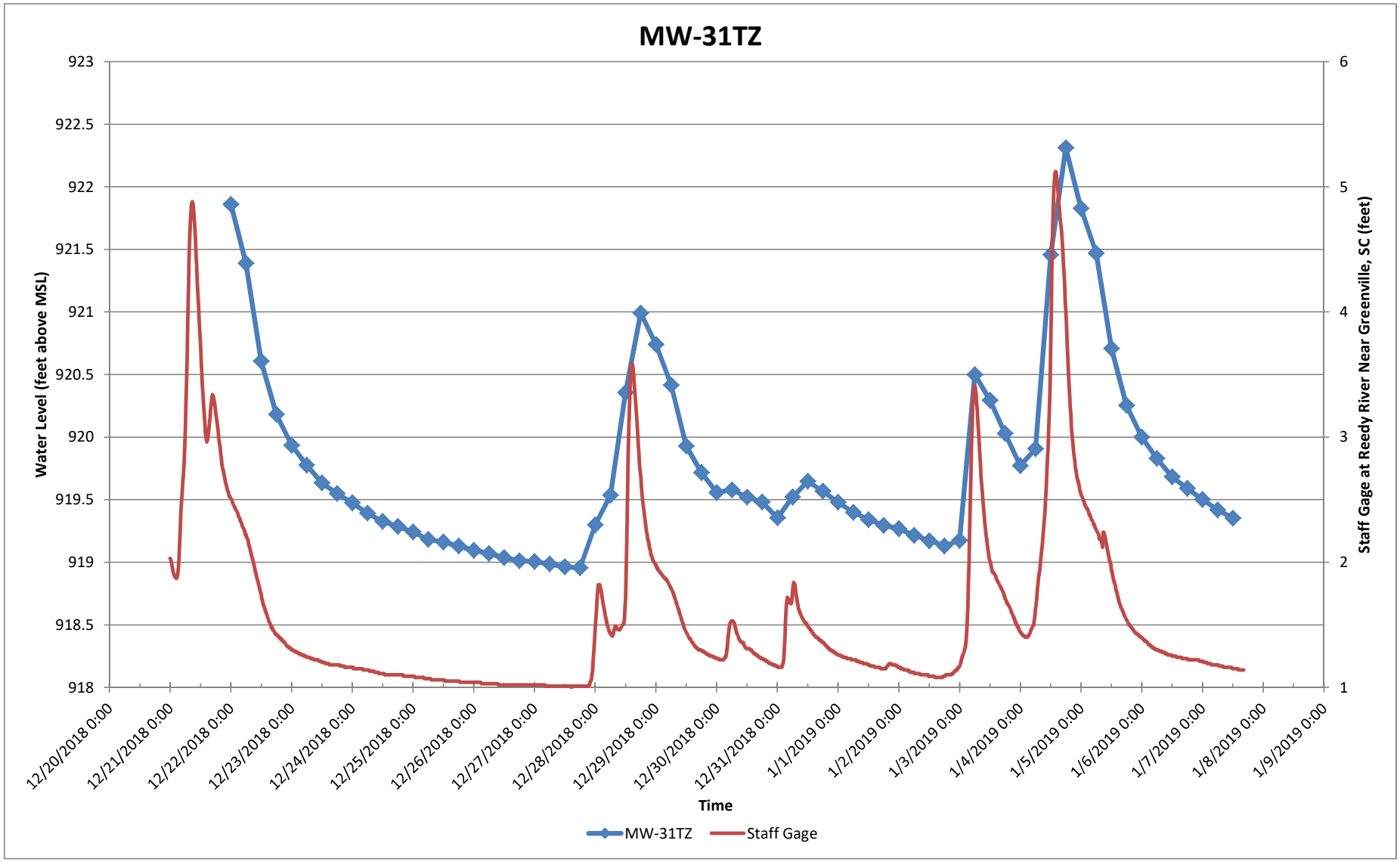
1/8/2019 0:00
1/9/2019 0:00
Time
MW-31S
Staff Gage


MW-31TZ
Water Level (feet above MSL)
Staff Gage at Reedy River Near Greenville, SC (feet)
923
922.5
922
921.5
921
920.5
920
919.5
919
918.5
918
6
5
4
3
2
1
12/20/2018 0:00
12/21/2018 0:00
12/22/2018 0:00
12/23/2018 0:00
12/24/2018 0:00
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12/26/2018 0:00
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12/30/2018 0:00
12/31/2018 0:00
1/1/2019 0:00
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1/5/2019 0:00
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1/9/2019 0:00
Time
MW-31TZ
Staff Gage